

HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Installation Guide



June 2004 (Third Edition)
Part Number 352869-003
Product Version 1.60

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HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Installation Guide

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About This Guide

This guide provides detailed information about installing the Rapid Deployment Pack—Windows Edition, configuring the Deployment Server and the provided scripted installation jobs and files, and upgrading to newer versions of software.

Audience Assumptions

To install and configure the Rapid Deployment Pack, it is assumed that you have knowledge of:

- Installing Microsoft® Windows®, either from CD or the network, using the unattend.txt mechanism
- Basic Windows management and administration, such as manipulating files and folders in Windows Explorer, creating users and groups in Computer Management, and setting share permissions
- (For Linux deployments only) Installing Linux either from CD or a network
- (For Linux deployments only) Basic Linux command line interface operations; for example, mounting and unmounting floppy and CD-ROM drives, creating directories, and copying files
- Network infrastructure

To perform tasks after the installation is complete, it is assumed that you have knowledge of editing files within Windows and Linux.

Related Documents

HP recommends reviewing the following documentation before reading this guide:

- *HP ProLiant Essentials Rapid Deployment Pack Planning Guide*
- *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix*

HP recommends reviewing the following documentation after reading this guide:

- *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide*

All of the documents can be found in .pdf format at <http://www.hp.com/servers/rdp>, from the Rapid Deployment Pack CD autorun utility, at \pim-ds\docs on the product CD, and at .\docs on the Deployment Server.

Where to Go for Additional Help

Refer to the following sources for additional information about the Rapid Deployment Pack.

Online Resources

- HP ProLiant Essentials Rapid Deployment Pack website at <http://www.hp.com/servers/rdp>
- HP ProLiant Essentials Rapid Deployment Pack Knowledge Base at <http://www.hp.com/servers/rdp/kb>
- HP ProLiant Essentials Rapid Deployment Pack What's New at <http://www.hp.com/servers/rdp>
- ITRC User Forum "ProLiant Deployment & Provisioning" at <http://forums.itrc.hp.com>
- Altiris website at <http://www.altiris.com>

Telephone Numbers

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518.
- In Canada, call 1-800-263-5868.

For HP technical support:

- In the United States and Canada, call 1-800-652-6672.
- Outside the United States and Canada, refer to <http://www.hp.com>.

Overview

A license allows a server to be deployed and managed by the Altiris Deployment Solution. One license is required for each server being managed. After a license is applied to a specific server, the license cannot be removed or transferred to another server.

A license file contains licenses for a predetermined number of servers. License files are applied without reference to the Rapid Deployment Pack version and are not specific to Rapid Deployment Pack—Windows Edition or Rapid Deployment Pack—Linux Edition, as long as the one-license-per-server requirement is met.

Licensing Options

The Rapid Deployment Pack offers five license purchasing options:

- One-node license—Use this license to deploy and manage one server through the Deployment Server.
- 10-node license—Use this license to deploy and manage 10 servers through the Deployment Server.
- Flexible Quantity license—These kits are available to obtain an exact quantity of licenses in the purchase of a single software option kit.
- Activation Key Agreement—This option provides the ability to order a key in the quantity desired and for a specific time and purchase a license for each server deployed over time.
- Blade enclosure bundle—A bundle of eight or 20 licenses are available with a ProLiant BL server enclosure.

For more information about Flexible Quantity license and Activation Key Agreement options, refer to the ProLiant Essentials Licensing Options at <http://www.hp.com/servers/rdp>.

Obtaining Licenses

The following sections explain how to obtain evaluation or purchased licenses for your servers.

Evaluation Licenses

Two types of evaluation licenses are available for use:

- A 10-node, seven-day evaluation license is built into the Deployment Solution. No license file is required. The evaluation license can be applied during the Deployment Solution installation.
- To obtain and use a 10-node, 30-day evaluation license:
 - a. Access <http://www.hp.com/servers/rdp/eval>.
 - b. Follow the online instructions to complete the registration process. An evaluation license file will be e-mailed to you.

Purchased Licenses

To register your product and obtain your license file:

1. Locate the unique 20-character product registration number on the label **on the back** of the software packaging box. The registration number is in the form:

xxxxxx-xxxxxx-xxxxxx-xxxxxx

IMPORTANT: Keep your product registration number for future reference.

2. Access <http://www.hp.com/servers/rdp/register>.
3. Follow the online instructions to complete the registration process. A license file will be e-mailed to you.

Additional purchased licenses can be transferred or combined with already registered licenses. Refer to the instructions at <http://www.hp.com/servers/rdp/register>.

Applying a License File

The following sections explain how to apply evaluation or purchased licenses to your servers and how to add or replace existing licenses.

Applying License Files During a First-Time Installation

A 10-node, seven-day evaluation license is built into the Deployment Server. To apply this license, select **Free 7 day license** during the first-time installation at the Deployment Server Client Access Point Information screen.

To apply a purchased or evaluation license file, enter the path to the license file in the License File field during the installation at the Deployment Server Client Access Point Information screen.

To view the number of licensed nodes from the console, click **Help>About**.

Applying License Files During an Upgrade Installation

To continue using existing licenses after performing an upgrade, select **Upgrade using existing licenses** during the installation at the Deployment Server Client Access Point Information screen.

To view the number of licensed nodes from the console, click **Help>About**.

Adding Licenses to an Existing Installation

To apply additional purchased licenses to an existing installation, add the new license file to your Deployment Server:

1. Run the Altiris License utility by clicking **Start>Programs>Altiris>Deployment Solution>Product Licensing Utility**.
2. Enter the path to the new license file path in the Activation Key File Information field, and then click **Next**.
3. Follow the online instructions to apply your additional licenses.

To view the number of additional licensed nodes from the console, click **Help>About**.

Replacing Licenses in an Existing Installation

If you have previously purchased, returned, or transferred licenses and have obtained a new license file to replace your existing license file:

1. Run the Altiris License utility by clicking **Start>Programs>Altiris>Deployment Solution>Product Licensing Utility**.
2. Enter the path to the new license file path in the Activation Key File Information field, and then click **Next**.
3. Follow the online instructions to apply your additional licenses, ensuring that the Replace all existing license Activation Keys with this new Activation Key checkbox is selected.

To view the number of licensed nodes from the console, click **Help>About**.

First-Time Installation

Deployment Infrastructure

The following sections describe basic and multi-server deployment infrastructures and the components of each.

Basic Deployment Infrastructure

In a basic deployment infrastructure, all the Deployment Server components are installed on one Windows-based server. The Altiris Deployment Solution components include:

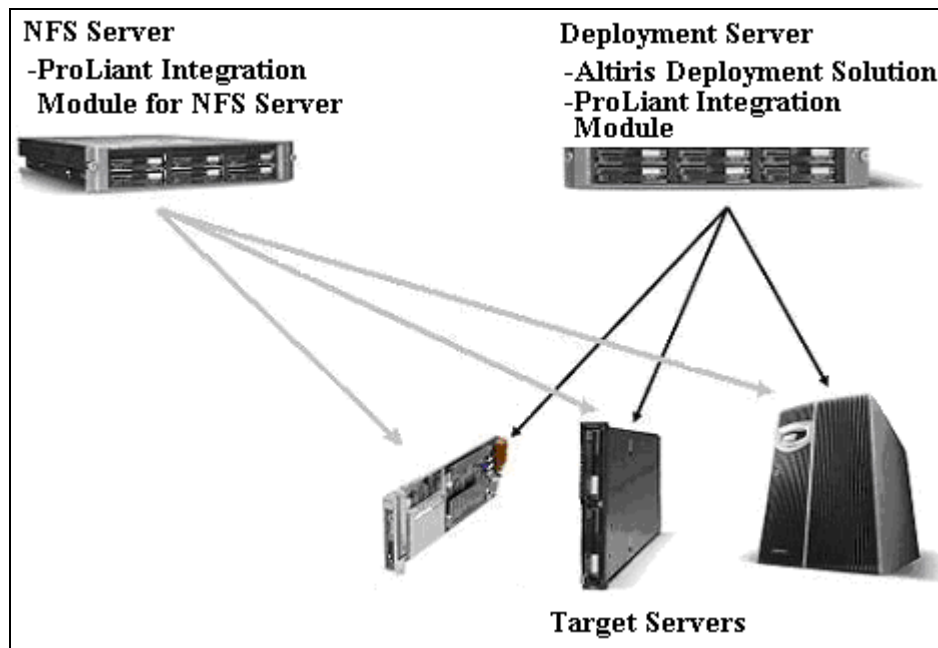
- Deployment Server Console
- Deployment Server
- Preboot eXecution Environment (PXE) server
- Client Access Point (file share)

IMPORTANT: Database management software is required, but is no longer automatically installed with the Rapid Deployment Pack. MSDE 2000 with Service Pack 3a is provided on the Rapid Deployment Pack CD and can be installed with the new Local Computer Install Helper during the Deployment Solution installation.

The ProLiant Integration Module for NFS is installed on a Linux-based server. The Rapid Deployment Pack uses NFS as the Linux installation method because:

- The NFS installation method works best across the various Linux distributions.
- Advanced Linux users can use a Linux server running NFS to build kernels, drivers, or other components that can be installed along with the distribution.

The following graphic depicts a basic deployment setup.

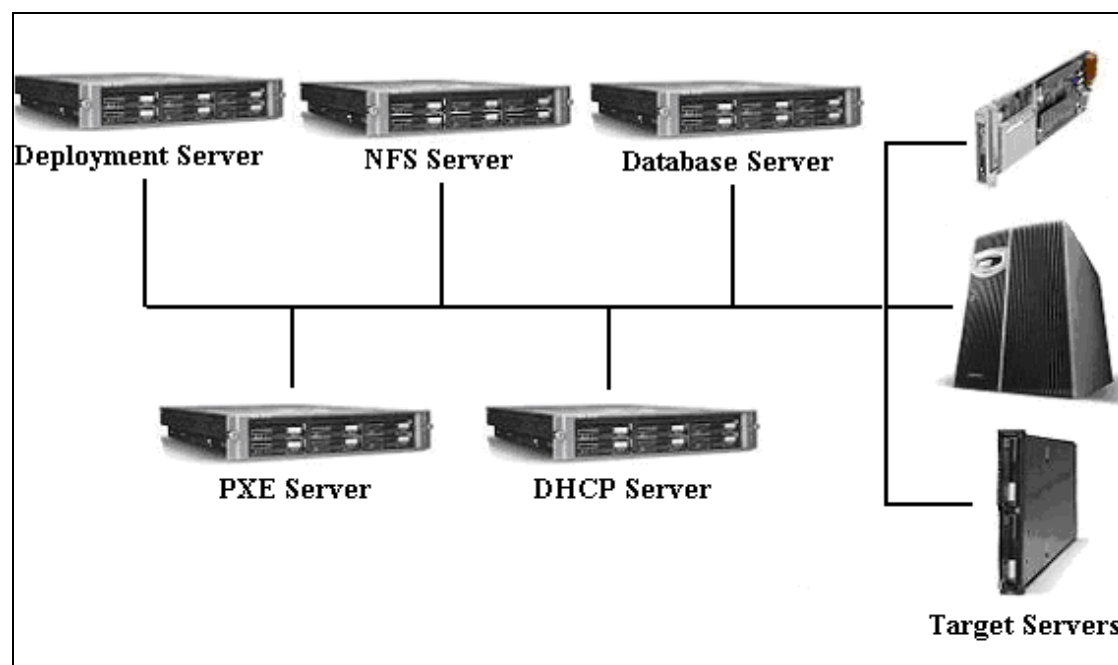


Multi-Server Deployment Infrastructure

A multi-server deployment infrastructure installation enables you to select which server components to install on multiple Windows-based servers. For example, you can assign another file server as the Client Access Point or another server as the database.

As with the basic installation method, the ProLiant Integration Module for Deployment Server is installed on the intended deployment server, and the ProLiant Integration Module for NFS Server used for Linux scripted installations is installed on the NFS server.

The following graphic depicts the multi-server deployment infrastructure.



Installation Requirements

This section describes the requirements to successfully install each component of the Rapid Deployment Pack.

NOTE: The Rapid Deployment Pack cannot be installed through a Terminal Services or remote shell connection.

Network Infrastructure Requirements

The Rapid Deployment Pack is designed to perform optimally with DHCP and PXE in the network environment. If PXE is used to perform remote deployment of servers, DHCP must be installed and accessible on the network before the Altiris Deployment Solution installation to ensure correct installation of PXE services. Boot diskettes can be used as an alternative to DHCP and PXE.

System Requirements

The following system requirements for the deployment server, NFS server, and target servers must be met before installing the Rapid Deployment Pack.

Deployment Server

The deployment server hardware and network configuration must meet the following requirements:

- Intel® Pentium® III or higher processor
- At least 256 MB RAM
- CD-ROM drive
- Network connection, configured with a static IP address

IMPORTANT: It is difficult to change the IP settings to point to a different NIC after the Deployment Solution is installed on a system. Changing these settings could cause the Deployment Server to function incorrectly.

- Current date and time for the Deployment Server set using ROM-Based Setup Utility (RBSU).

The deployment server software and configuration must meet the following requirements:

- A supported Windows operating system installed (for supported operating systems, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix*)
- 1.5 GB of disk space available, plus additional space to store any captured disk images, additional Windows operating systems, or application installation files
- ProLiant Support Pack for Windows installed to provide the latest supported network drivers for the Deployment Server (not for target installations)

HP recommends having the following items available:

- A license file for purchased licenses or 30-day evaluation licenses (for information about licensing, refer to Chapter 1 of this guide)
- Windows 98 Second Edition boot diskette or CD (required for creating PXE images and boot diskettes)
- Windows 2000 and/or Windows Server 2003 operating system CDs
- Red Hat Enterprise Linux distribution CD #1 (required for populating boot files if certain Red Hat Enterprise Linux jobs are selected)

For additional information about requirements for the Deployment Server, refer to the *Altiris Deployment Solution 6.1 Product Guide*, which can be found at <http://www.hp.com/servers/rdp>.

NFS Server

The NFS server hardware and network configuration must meet the following requirements:

- CD-ROM drive
- A network connection configured with a static IP address and DNS available on the network (if a host name is used in the provided jobs)

The NFS server software and configuration must meet the following requirements:

- A supported Linux operating system installed (for supported operating systems, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix*)
- ProLiant Support Pack for Linux installed to provide the latest supported network drivers for the NFS server (not for target installations)
- At least 1.9 GB of disk space available on the /usr directory for each distribution installed from the Linux NFS server
- NFS software installed and configured (if a firewall is installed on the server, the configuration must allow incoming NFS connections; for example, UDP port 2049 for a typical NFS port)

For the Rapid Deployment Pack installation, HP recommends having Red Hat Linux or UnitedLinux distribution CDs available.

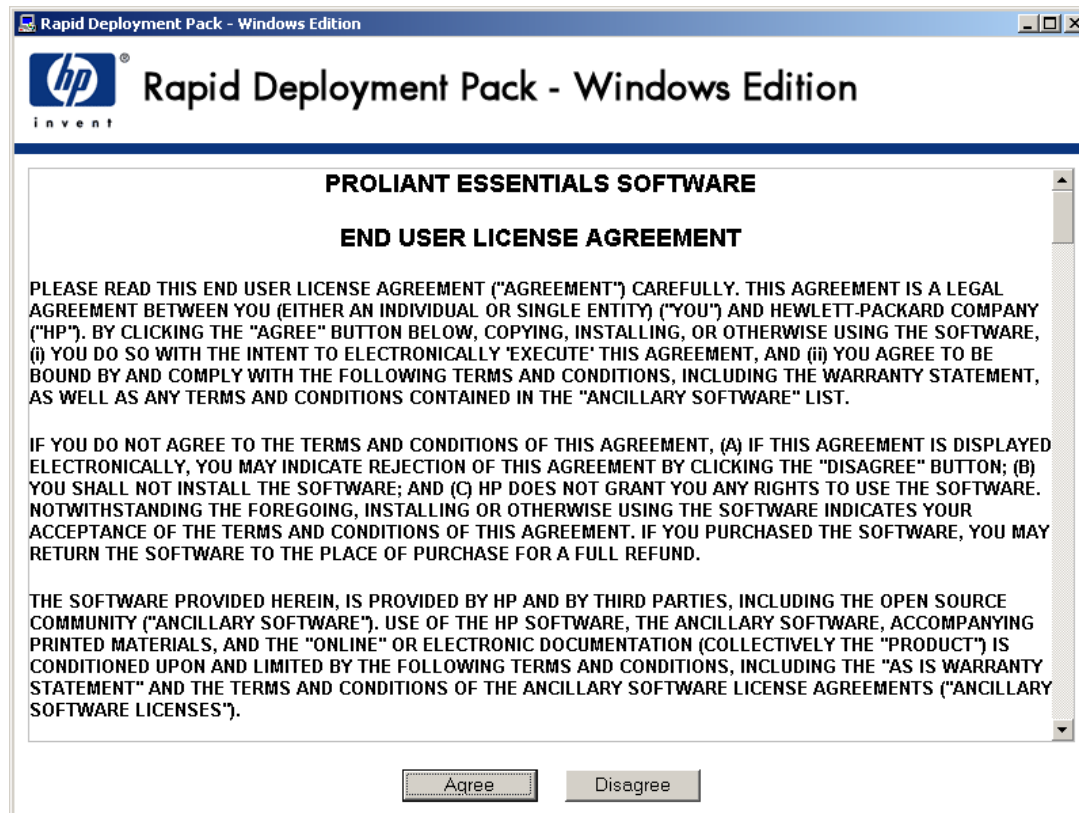
Target Servers

The Rapid Deployment Pack supports ProLiant BL servers and select ProLiant ML/DL servers. For details on target server requirements, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix* for your version of Rapid Deployment Pack.

Basic Installation

To install software from the Rapid Deployment Pack—Windows Edition CD to the deployment server:

1. Insert the Rapid Deployment Pack—Windows Edition CD into the intended deployment server.
2. Read the license agreement displayed by the autorun. If you agree to the terms of the license agreement, click **Agree** to continue.

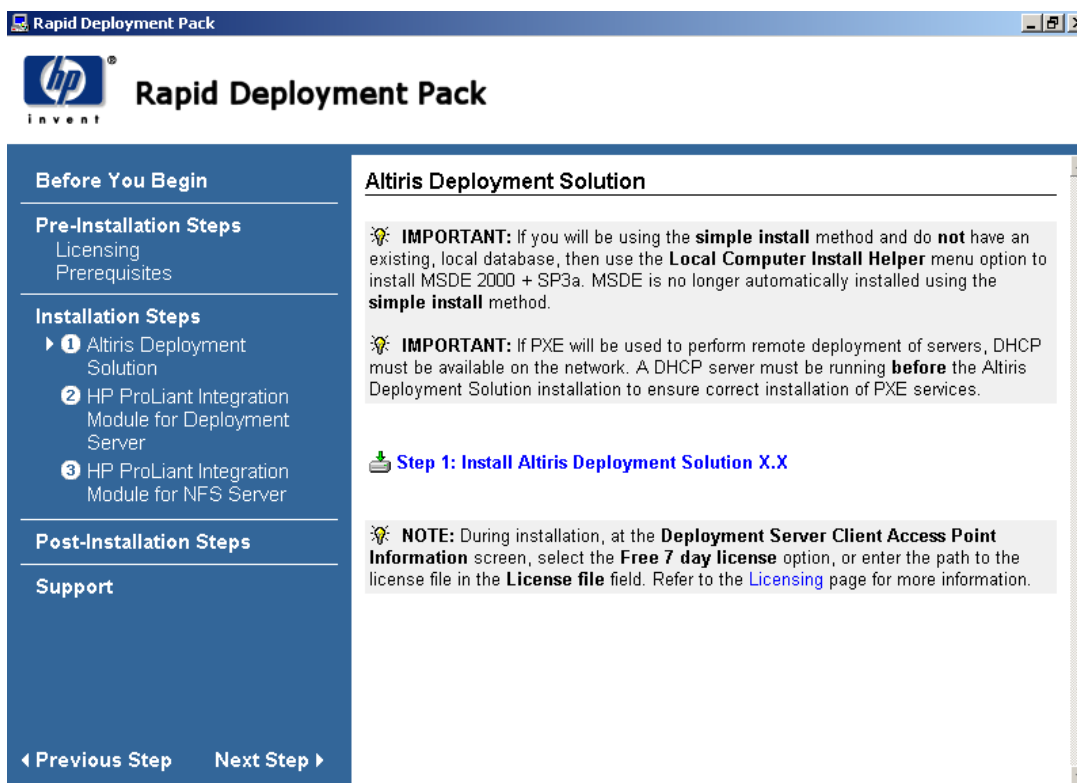


3. Review the pre-installation steps before installing the Rapid Deployment Pack software.

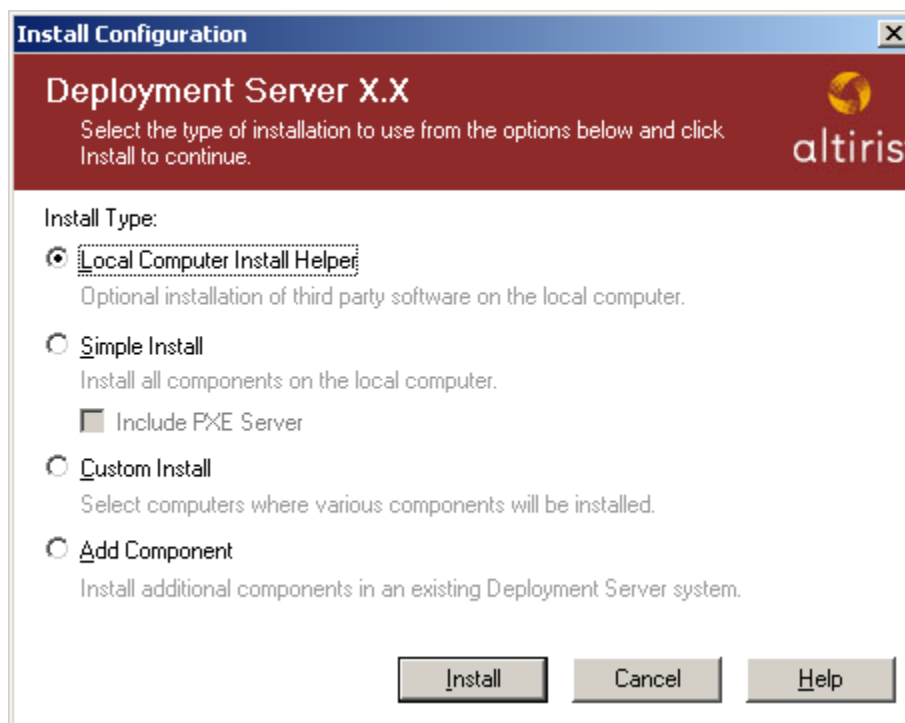


Altiris Deployment Solution

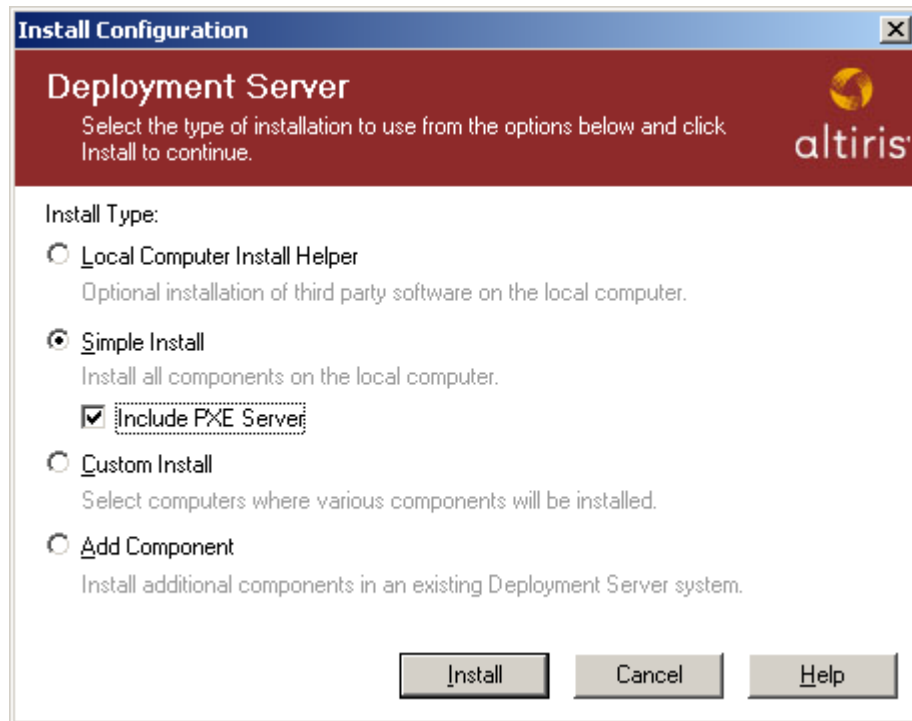
1. Click **(1) Altiris Deployment Solution** from the left pane of the autorun menu, and then click **Step 1: Install Altiris Deployment Solution x.x**, where x.x is the software version.



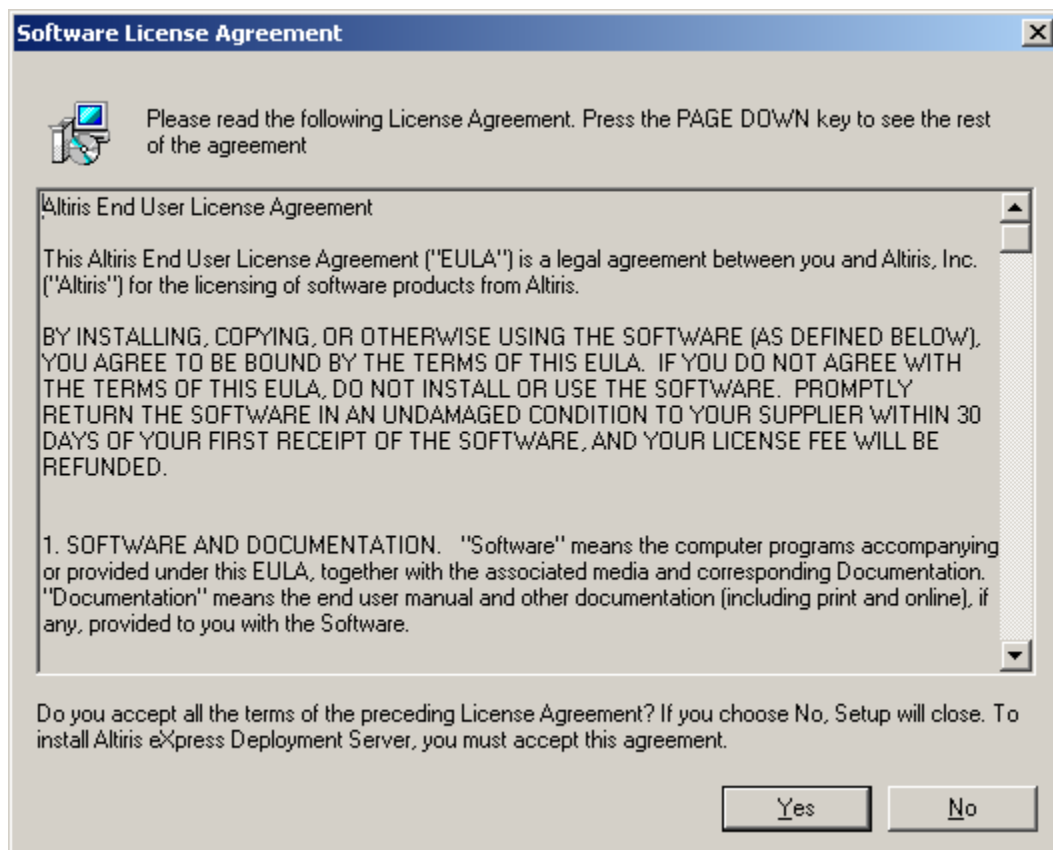
2. If there is no existing local database or Microsoft .NET Framework is not installed:
 - a. Select **Local Computer Install Helper**.
 - b. Click **Install**.
 - c. Follow the onscreen instructions.
 - d. After the installation is complete, reboot the server and restart the installation.



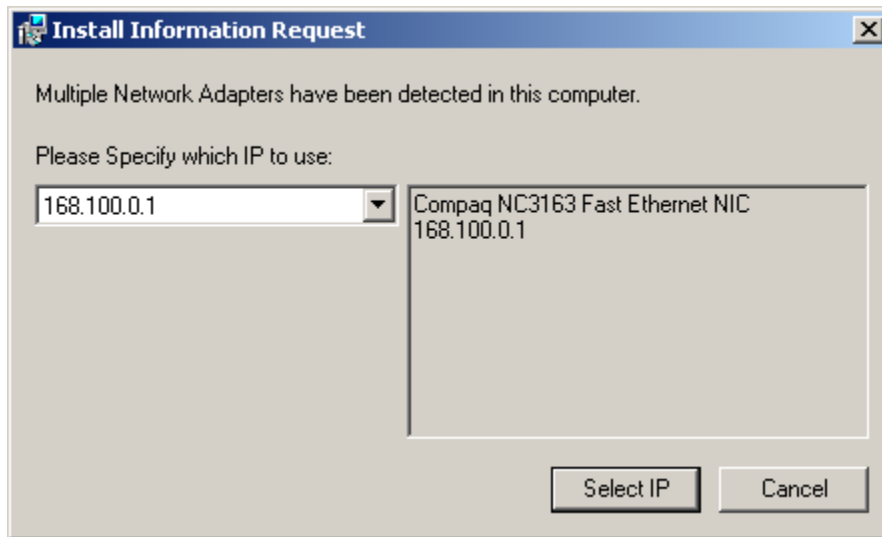
3. Select **Simple Install**, select the **Include PXE Server** checkbox, and then click **Install** to begin the installation process.



4. Read the license agreement. If you agree to the terms of the license agreement, click **Yes** to continue.



5. If installing on a system with multiple NICs, select the NIC to use as the Deployment Server interface, then click **Select IP**.



IMPORTANT: It is difficult to change the IP settings to point to a different NIC after the Deployment Server software is installed on a system. Changing these settings could cause the Deployment Server to function incorrectly.

6. At the Deployment Server Client Access Point Information screen, enter the user-specified information as appropriate, and then click **Next**.
 - **File server path**—This is the default installation directory. Accept the default path of `.\\program files\\altiris\\express\\deployment server`.

NOTE: Specify a drive with enough available space to hold the disk images to be captured and deployed.

 - **Create eXpress share**—Be sure that this checkbox is selected (default).
 - **License file**—Select **Free 7 day license**, or select **License file** enter the license file path and name. For more information, refer to Chapter 1 of this guide.
 - **Service username**—Accept the default user name (be sure it has administrator privileges).
 - **Service Password**—Enter the appropriate password for the **Service username**.

NOTE: The Service password is used for running the services and accessing the file share. The DOS agent environment stores the password in an encrypted file.

Altiris eXpress Deployment Server Installation

Deployment Server Client Access Point Information
Enter information about the Deployment Server Client Access Point where your images, RIPs, and Deployment program files should be installed.

Enter the directory to install the Deployment Server Client Access Point. This directory must be accessible from your Windows/DOS clients. This directory will store your images, RIPS, and DOS components.

File server path:

☒ Create 'eXpress' share. All Deployment Clients must have access to this file server path.

☒ Free 7 day license

☐ Upgrade using existing license

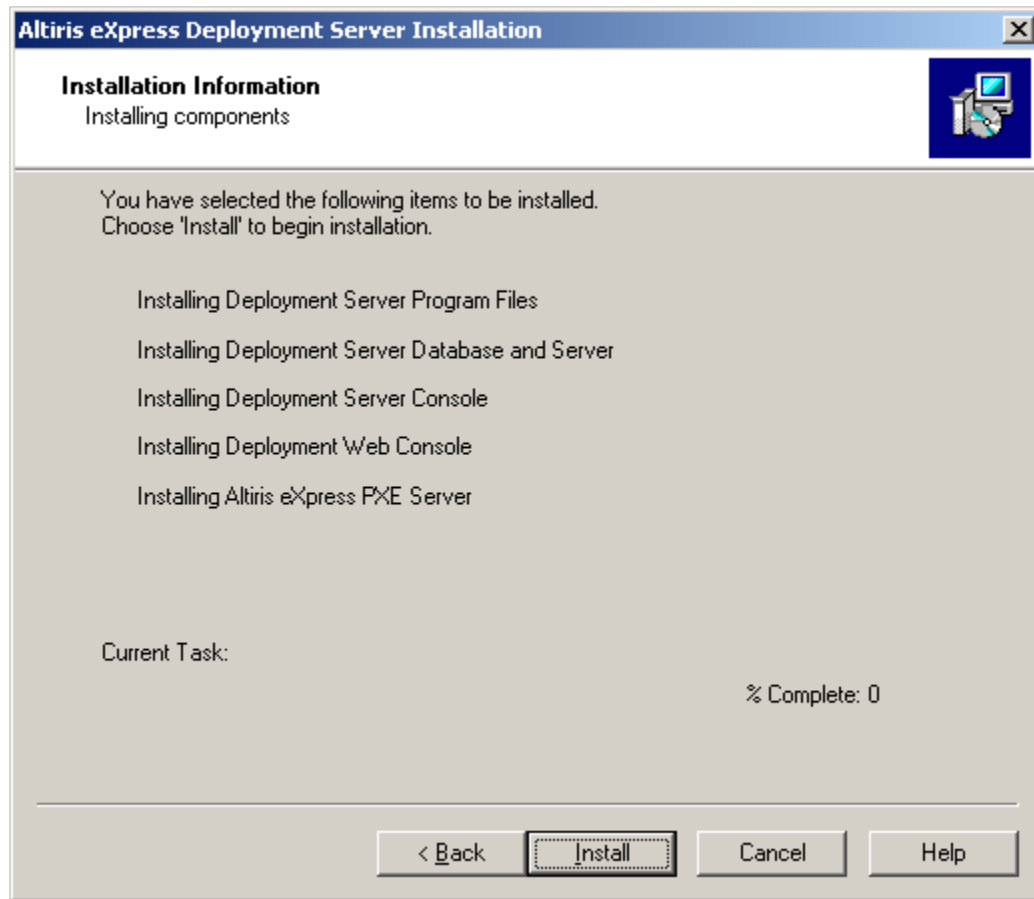
☐ License file:

The following account must exist on the Deployment Server Client Access Point and the Deployment Server.

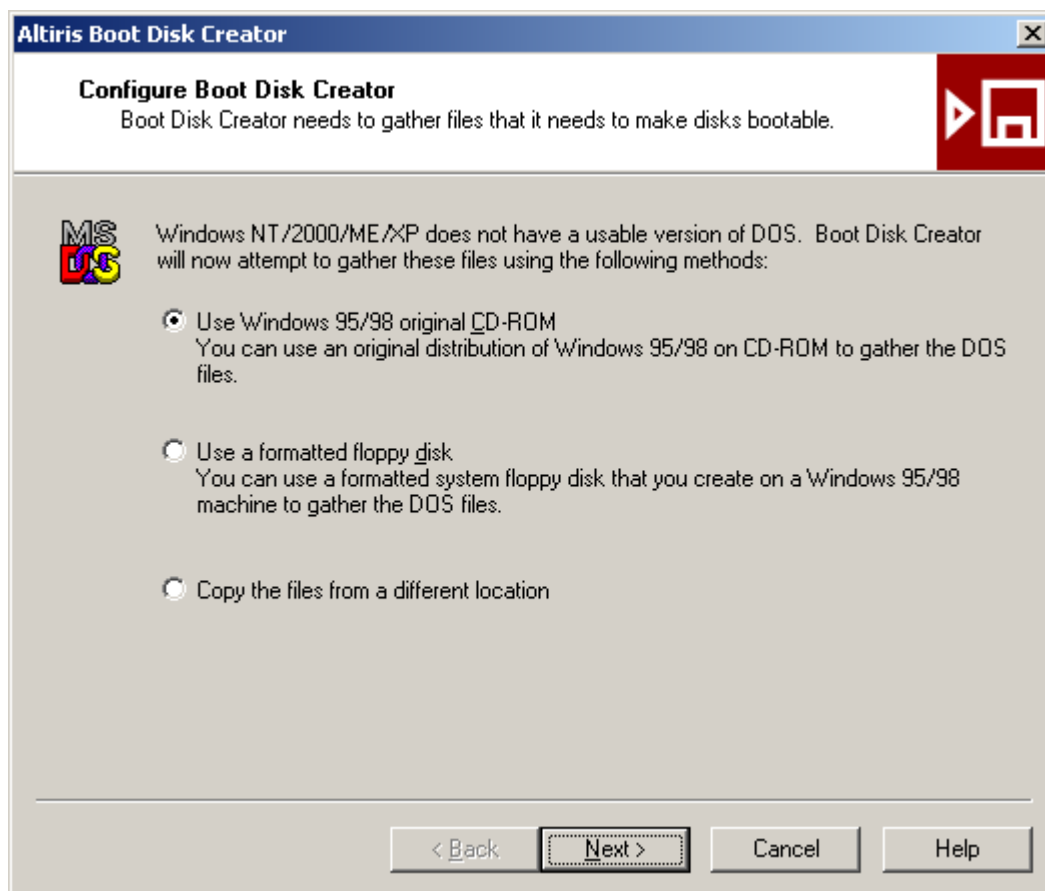
Service username: Service password:

< Back Next > Cancel Help

7. Click **Install** at the Installation Information screen. The Deployment Solution installation begins.



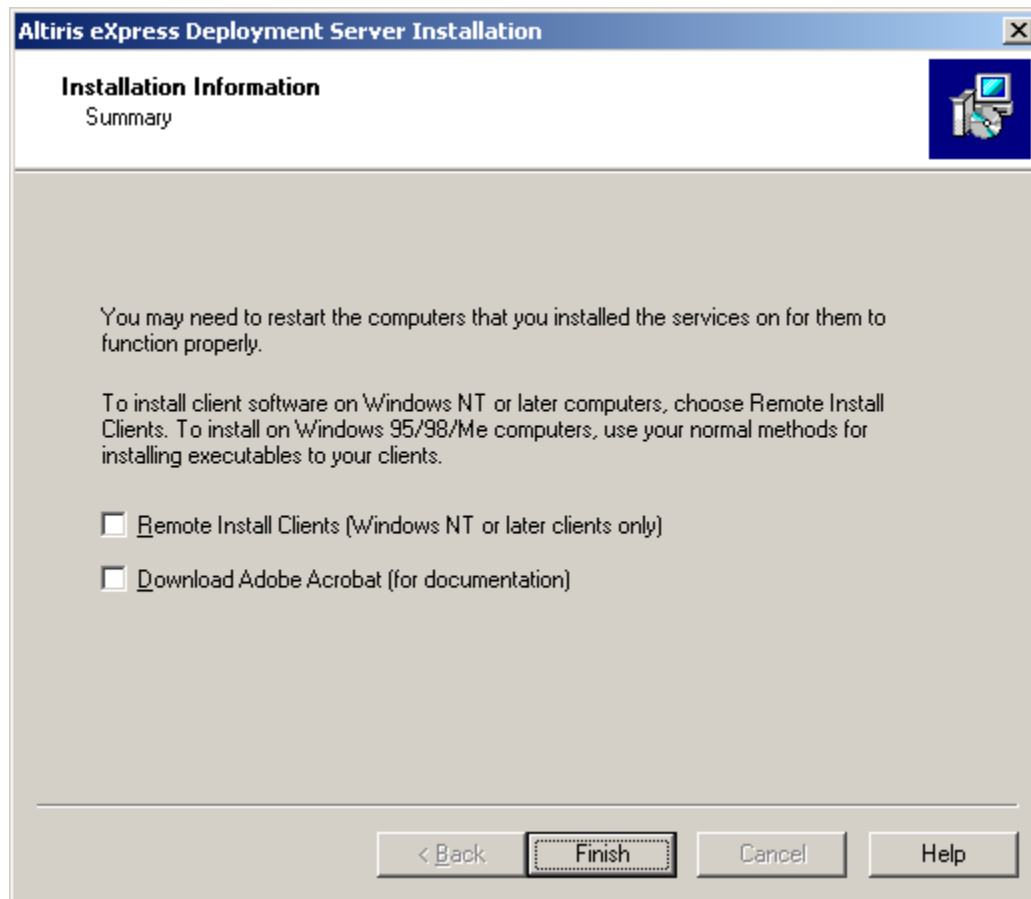
8. During the installation, you are prompted for either a Windows 9x boot diskette, CD, or a location from which to extract several DOS files to create PXE images and boot diskettes. Specify the appropriate location from which to extract files, and then click **Next**. Follow the prompts to install the DOS files.



IMPORTANT: If DOS files are provided from a diskette, the installation program might also prompt for optional DOS files. To omit copying the optional DOS files, select **No longer prompt for optional files**, and then click **Finish**.

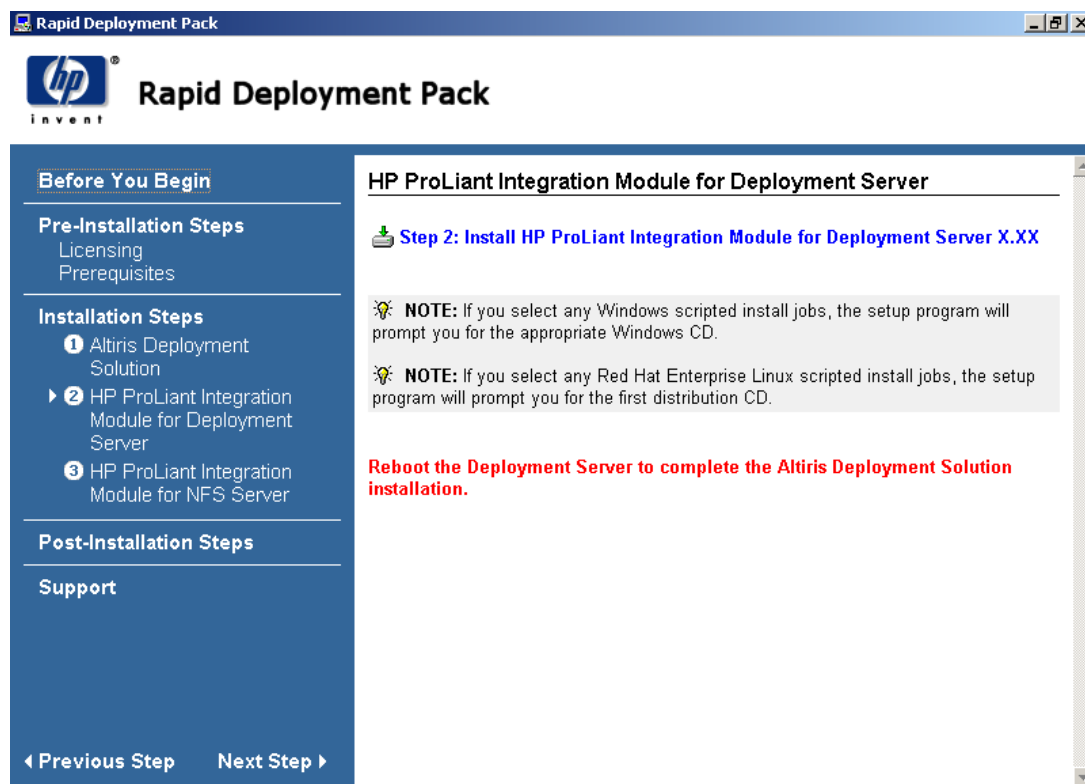
9. If the Windows 9x CD is used to install DOS files, reinsert the Rapid Deployment Pack—Windows Edition CD back into the CD-ROM drive when prompted to continue the Deployment Solution installation.

10. Click **Finish** at the Installation Information Summary screen.

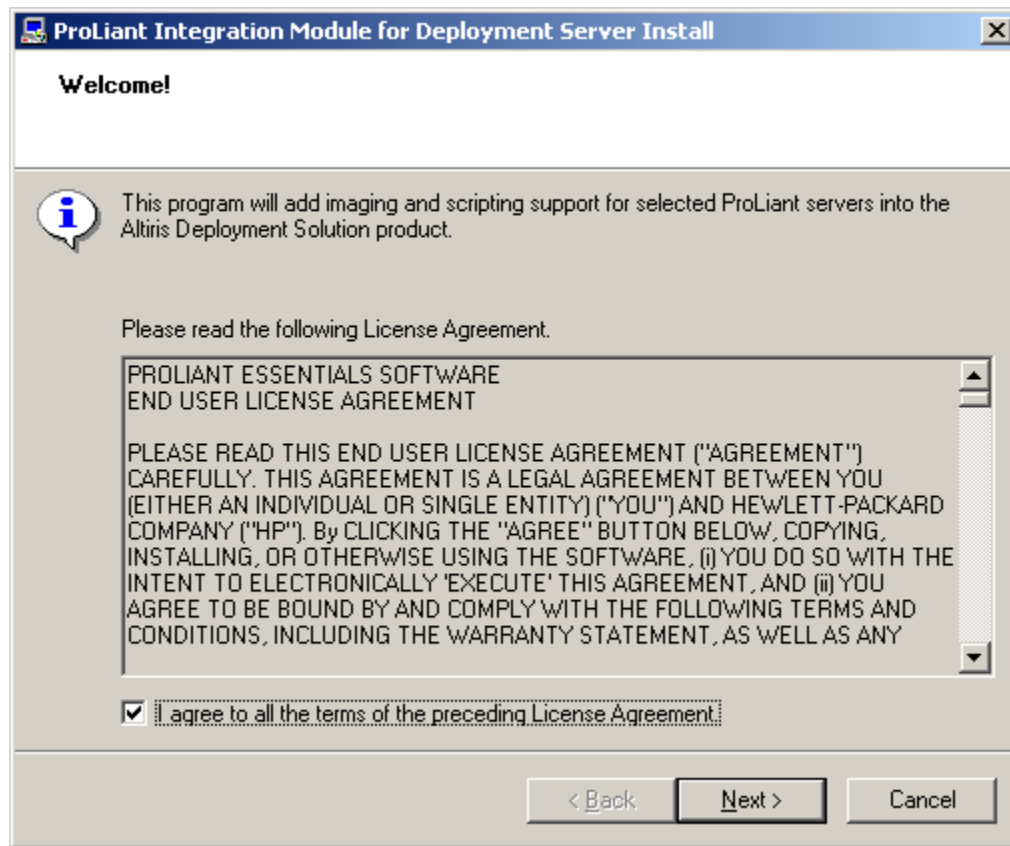


ProLiant Integration Module for Deployment Server

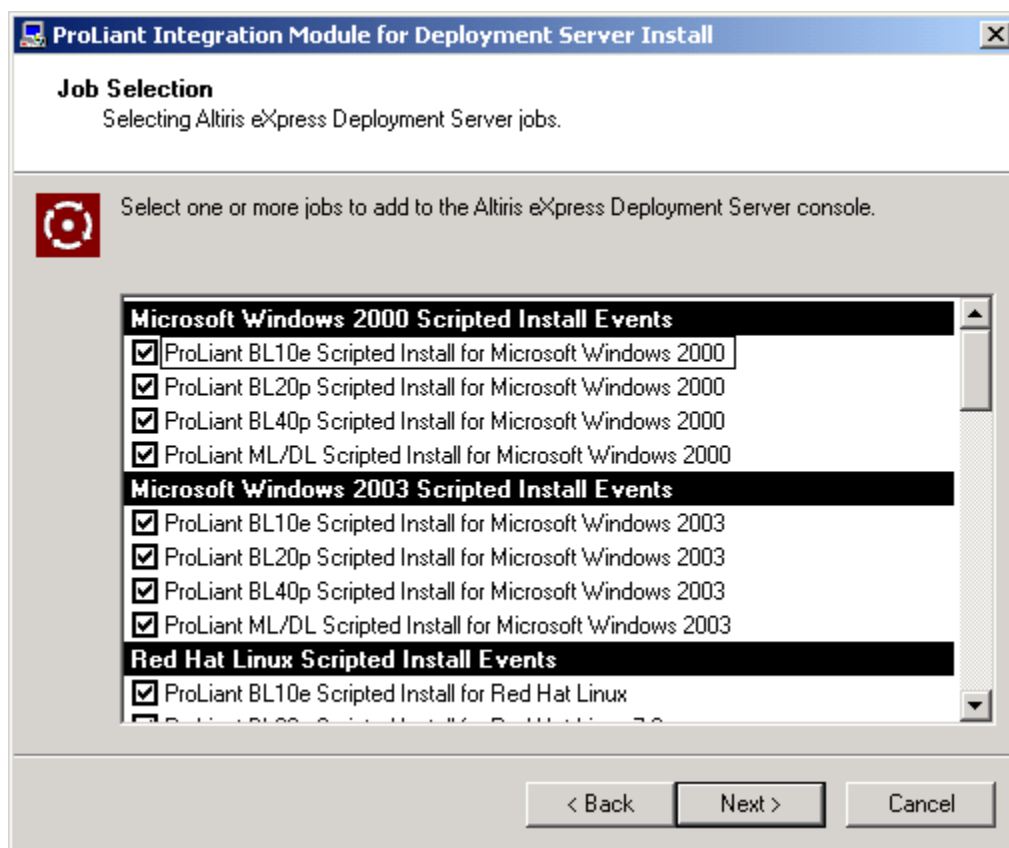
1. Click **(2) HP ProLiant Integration Module for Deployment Server** from the left pane of the autorun menu, and then click **Step 2: Install HP ProLiant Integration Module for Deployment Server X.XX**, where X.XX is the software version.



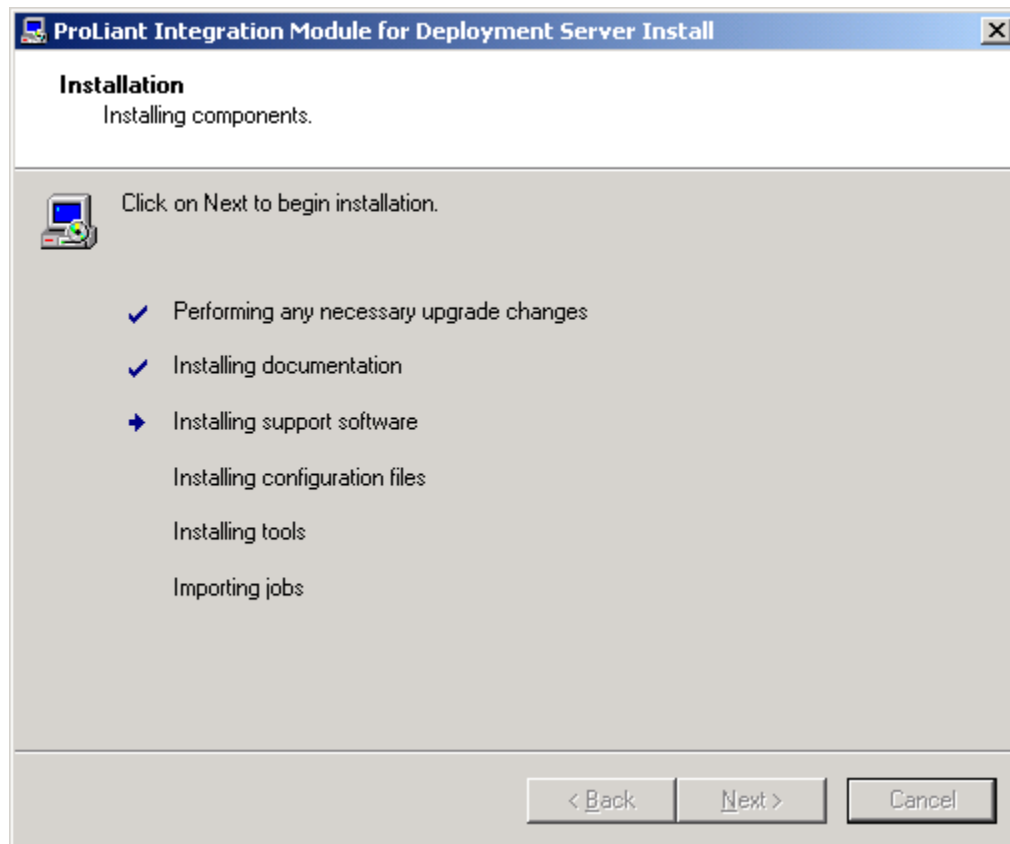
2. Read the license agreement. If you agree to the terms of the license agreement, select **I agree to all the terms of the preceding License Agreement**, and then click **Next** to continue.



3. A list of available deployment jobs appears. Select the deployment jobs that you want to import into the Deployment Server Console based on your deployment needs, and then click **Next**. The provided deployment jobs consist of:
 - Scripted Install Jobs—Enable a scripted hardware configuration and operating system installation of Windows, Red Hat Linux, or UnitedLinux to be performed on an unconfigured ProLiant server
 - Imaging Jobs—Enable the capture of the hardware configuration of a server and an image of a server hard drive, including the operating system and software applications, and deploy this hardware configuration and image to unconfigured ProLiant servers
 - Hardware Configuration Jobs—Enable the capture of the hardware configuration of an existing server and deploy that configuration to other servers
 - Packaged Cluster Deployment Jobs for Windows—Enable deployment of ProLiant DL380 Packaged Clusters using either imaging or scripting



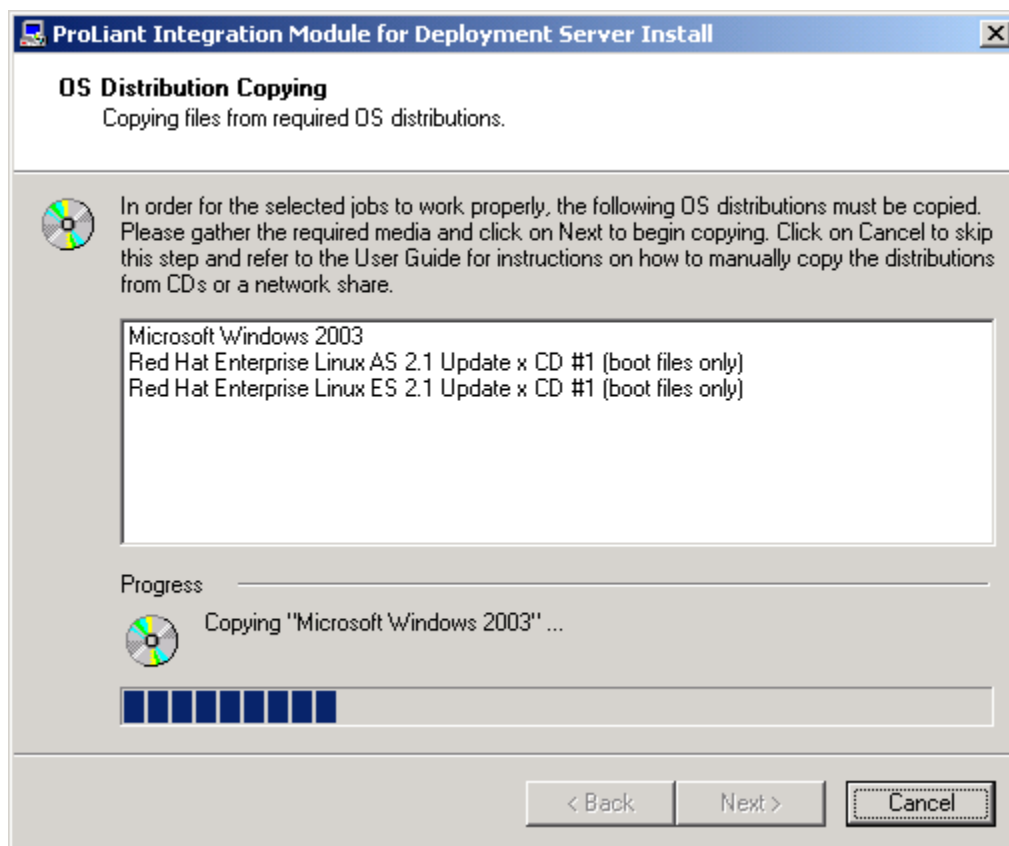
4. At the Installation screen, click **Next** to start the installation.



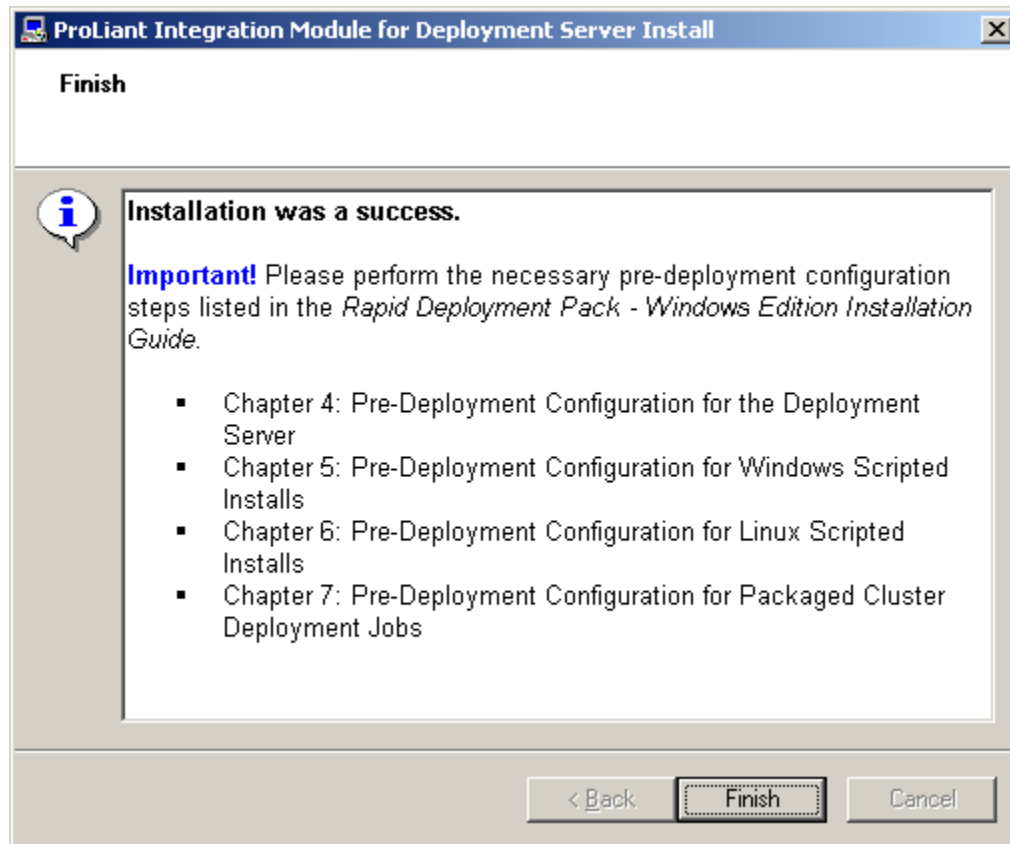
5. If necessary, you are prompted to insert operating system CDs to allow appropriate files required for scripted install jobs to be copied to the Deployment Server directory. Click **Next** to begin the copy process.

IMPORTANT: If you omit copying the Windows operating system CD and/or Red Hat Enterprise Linux boot files at this time by clicking **Cancel**, manually install these files at a later time. For instructions, refer to the appendices of this guide.

NOTE: You are prompted for a Red Hat Enterprise Linux CD #1 to copy only the Linux boot files to the Deployment Server. Red Hat Enterprise Linux CDs are installed on the Linux NFS server. Use the same CD distribution during the installations of the Deployment Server and NFS server.



6. Read the post-installation information displayed at the Finish screen, and then click **Finish**.



7. Reboot the deployment server to complete the ProLiant Integration Module for Deployment Server installation.

The Deployment Server installation is complete. However, before attempting to use the Deployment Server to perform scripted installations, complete the appropriate pre-deployment procedures in this guide.

ProLiant Integration Module for NFS Server

A Linux NFS server is required to deploy Linux using the provided scripted install jobs. To install the Rapid Deployment Pack on the Linux NFS server:

1. Log in as `root` at the intended NFS server.
2. Mount the CD:

```
mount /mnt/cdrom (Red Hat)
```

or

```
mount /media/cdrom (UnitedLinux)
```

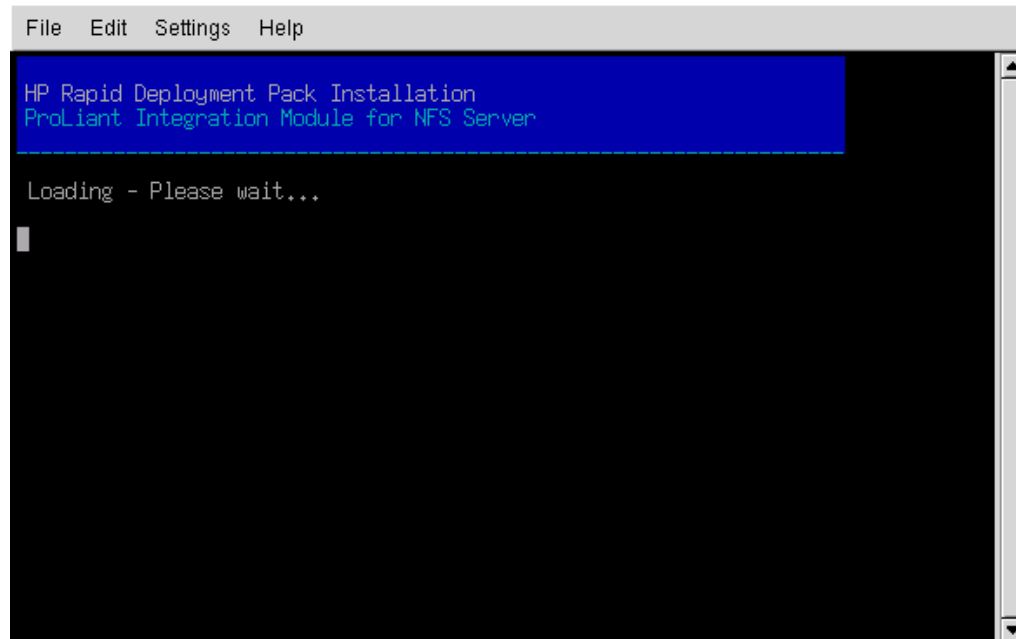

3. Run the setup script:

```
/mnt/cdrom/pim-nfs/setup-pimnfs.sh (Red Hat)
```

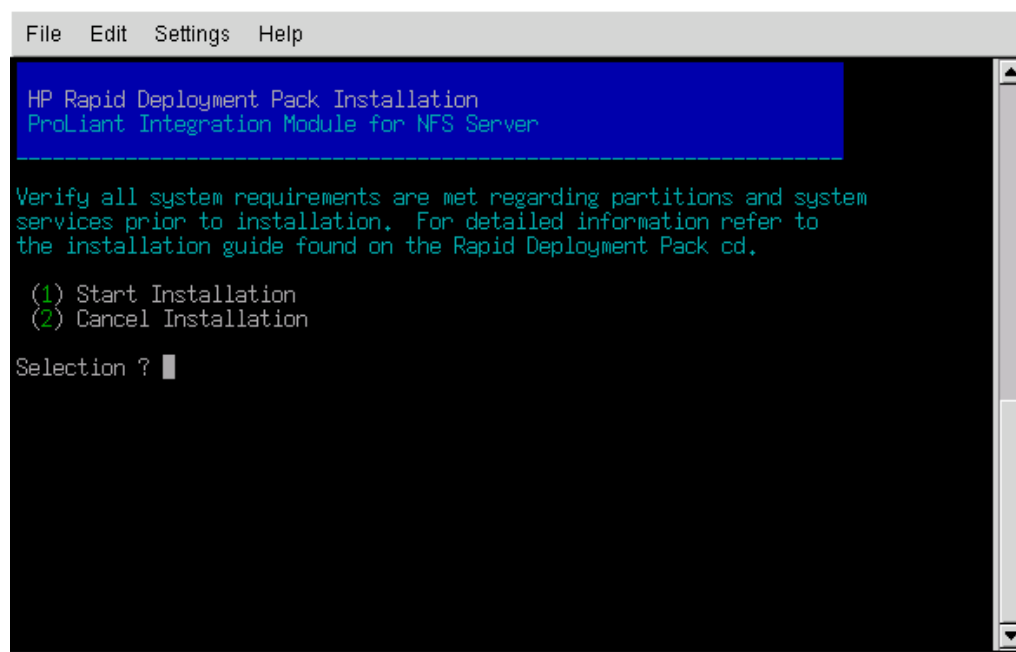
or

```
/media/cdrom/pim-nfs/setup-pimnfs.sh (UnitedLinux)
```

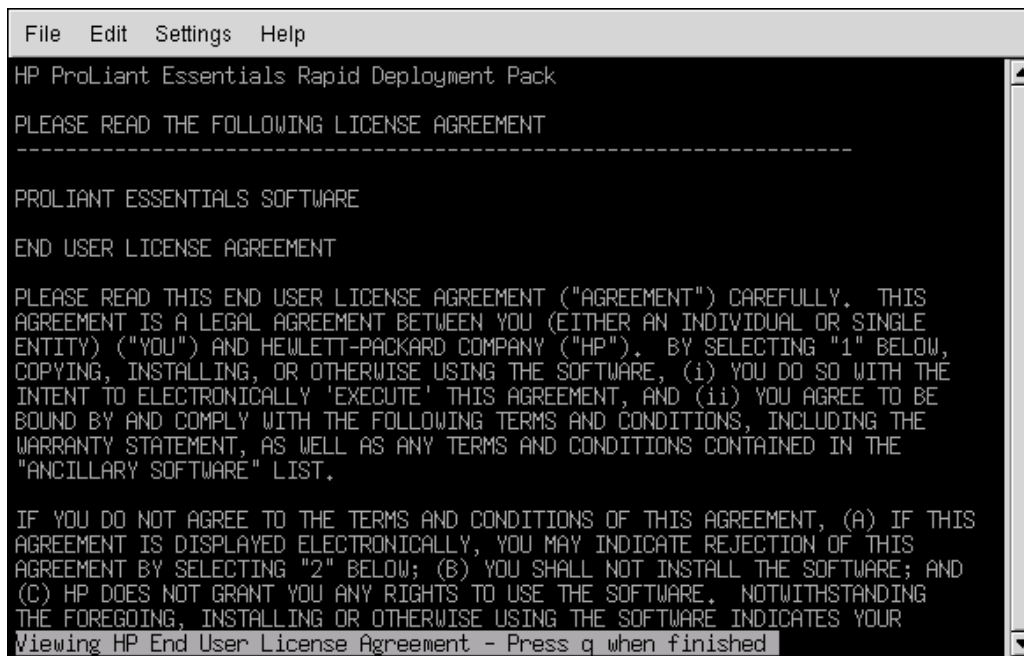
NOTE: Do not change directory to the CD-ROM directory to run the setup script.



4. Enter 1 to start the installation, and then press the **Enter** key.



5. Read the license agreement displayed, and then enter `q`.



A screenshot of a Windows-style application window titled "HP ProLiant Essentials Rapid Deployment Pack". The window has a menu bar with "File", "Edit", "Settings", and "Help". The main text area displays the following content:

```
HP ProLiant Essentials Rapid Deployment Pack

PLEASE READ THE FOLLOWING LICENSE AGREEMENT
-----

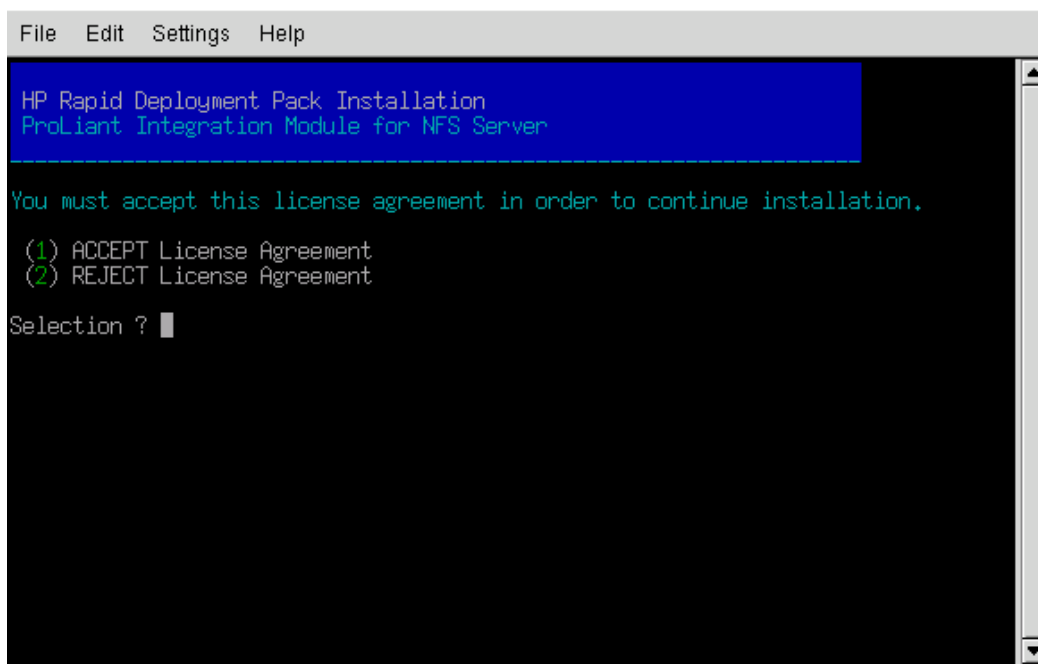
PROLIANT ESSENTIALS SOFTWARE

END USER LICENSE AGREEMENT

PLEASE READ THIS END USER LICENSE AGREEMENT ("AGREEMENT") CAREFULLY. THIS
AGREEMENT IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR SINGLE
ENTITY) ("YOU") AND HEWLETT-PACKARD COMPANY ("HP"). BY SELECTING "1" BELOW,
COPYING, INSTALLING, OR OTHERWISE USING THE SOFTWARE, (i) YOU DO SO WITH THE
INTENT TO ELECTRONICALLY 'EXECUTE' THIS AGREEMENT, AND (ii) YOU AGREE TO BE
BOUND BY AND COMPLY WITH THE FOLLOWING TERMS AND CONDITIONS, INCLUDING THE
WARRANTY STATEMENT, AS WELL AS ANY TERMS AND CONDITIONS CONTAINED IN THE
"ANCILLARY SOFTWARE" LIST.

IF YOU DO NOT AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT, (A) IF THIS
AGREEMENT IS DISPLAYED ELECTRONICALLY, YOU MAY INDICATE REJECTION OF THIS
AGREEMENT BY SELECTING "2" BELOW; (B) YOU SHALL NOT INSTALL THE SOFTWARE; AND
(C) HP DOES NOT GRANT YOU ANY RIGHTS TO USE THE SOFTWARE. NOTWITHSTANDING
THE FOREGOING, INSTALLING OR OTHERWISE USING THE SOFTWARE INDICATES YOUR
Viewing HP End User License Agreement - Press q when finished
```

6. If you agree to the terms of the license agreement, enter 1 to accept the license agreement, and then press the **Enter** key.



A screenshot of a Windows-style application window titled "HP Rapid Deployment Pack Installation". The window has a menu bar with "File", "Edit", "Settings", and "Help". The main text area displays the following content:

```
HP Rapid Deployment Pack Installation
ProLiant Integration Module for NFS Server

You must accept this license agreement in order to continue installation.

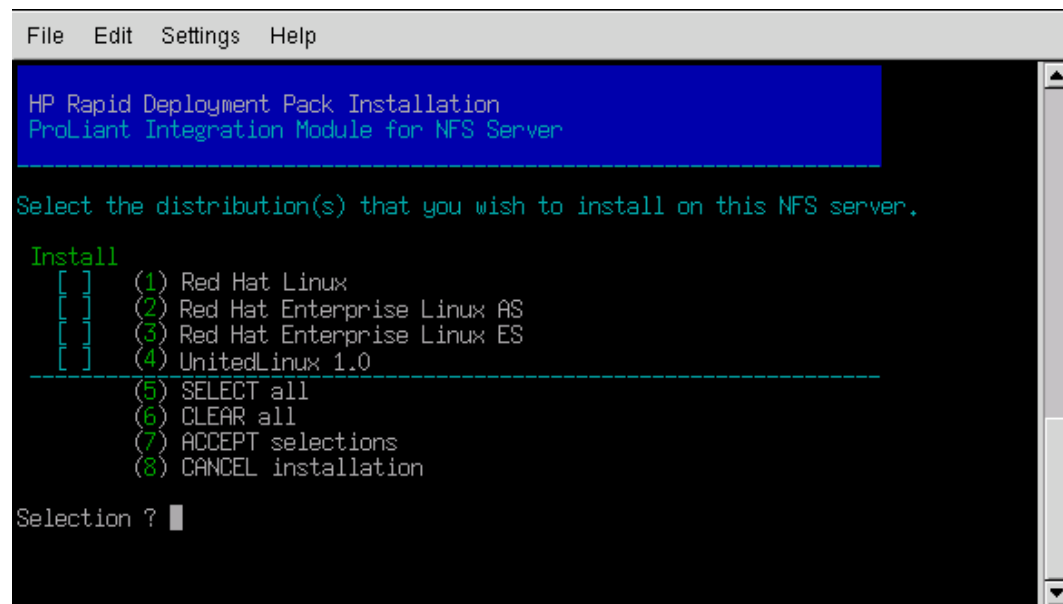
(1) ACCEPT License Agreement
(2) REJECT License Agreement

Selection ? █
```

A list of the supported Linux distributions that can be deployed with Rapid Deployment Pack appears. Selecting a Linux distribution copies the ProLiant Support Pack files for that distribution and starts the Linux distribution CD query process to copy the Linux files onto the NFS server.

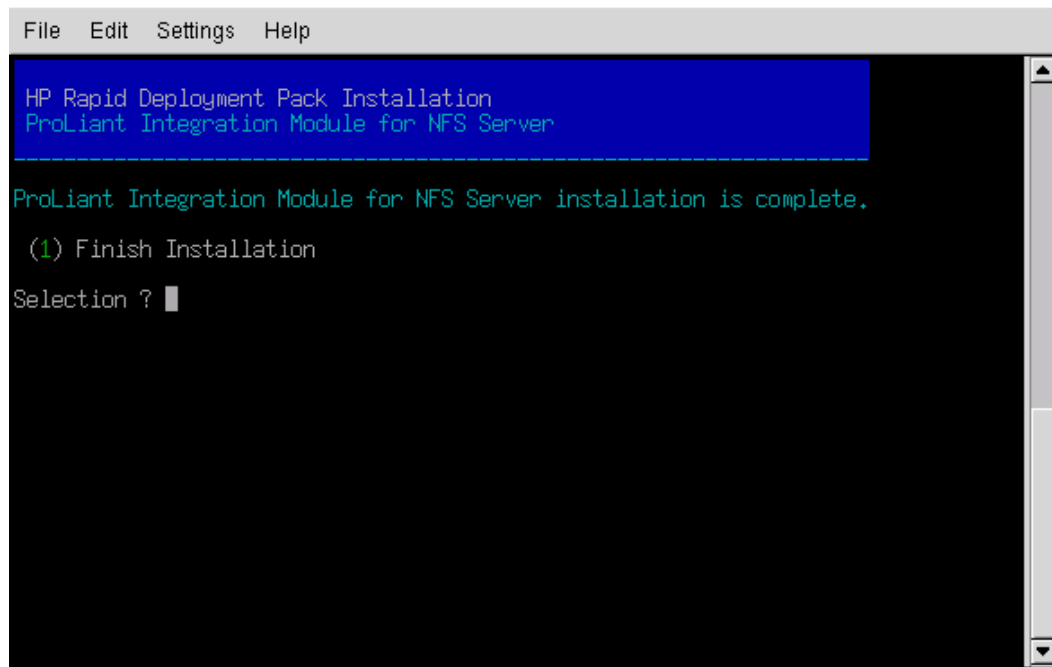
7. For each distribution to be installed, enter the corresponding selection number for the distribution and press the **Enter** key. To select all distributions, enter the appropriate number to **SELECT all** and press the **Enter** key.

NOTE: Selection numbers vary depending on the number of available distributions.



8. When you have selected all the Linux distribution to be installed, enter the appropriate number to **ACCEPT selections** and press the **Enter** key. The file copy and CD query process begins.
9. After the ProLiant Support Pack files and distributions files are copied and you are prompted for the Rapid Deployment Pack—Windows Edition CD, insert the CD into the CD-ROM drive.

10. The following screen confirms the ProLiant Integration Module for NFS Server installation is complete. Enter 1 to finish the installation, and press the **Enter** key.



The ProLiant Integration Module for NFS Server installation is complete. However, before attempting to use the Deployment Server to perform Linux distribution scripted installations, complete the appropriate pre-deployment procedures in this guide.

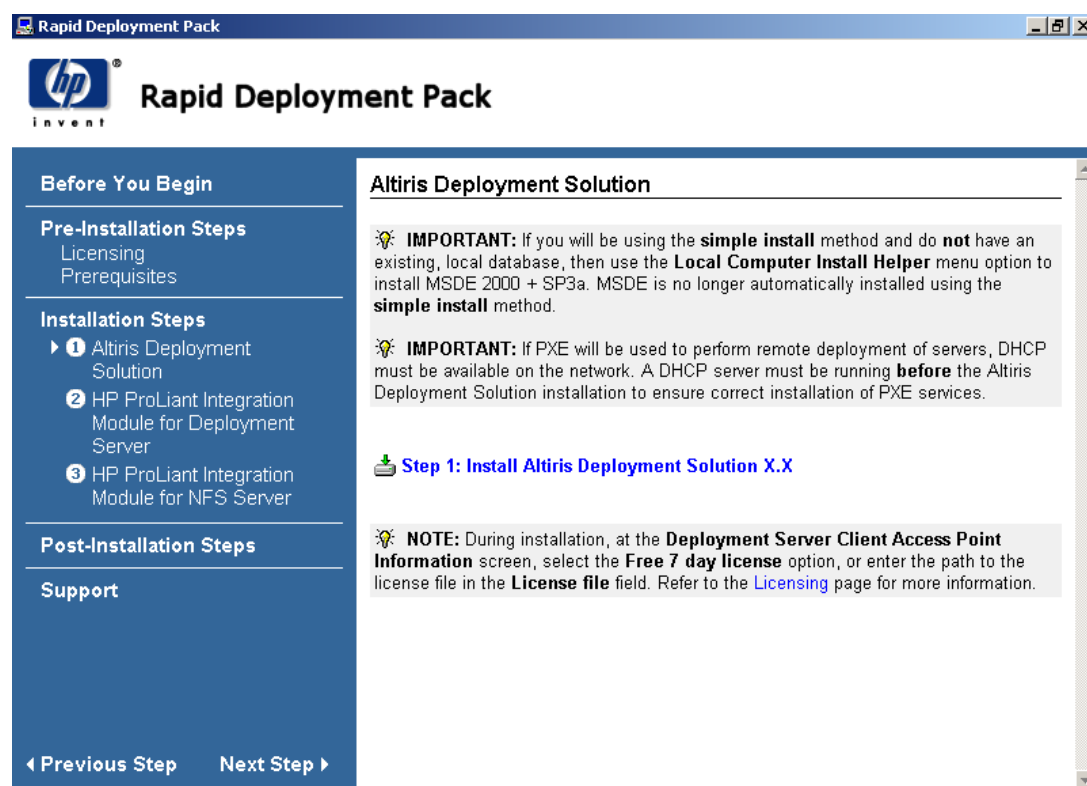
Multi-Server Installation

A multi-server deployment infrastructure installation enables you to select if and where you want to install each component of the Altiris Deployment Solution. As with the basic installation method, the ProLiant Integration Module for Deployment Server is installed on the intended Deployment Server, and the ProLiant Integration Module for NFS Server used for Linux scripted installations is installed on the NFS server.

Altiris Deployment Solution

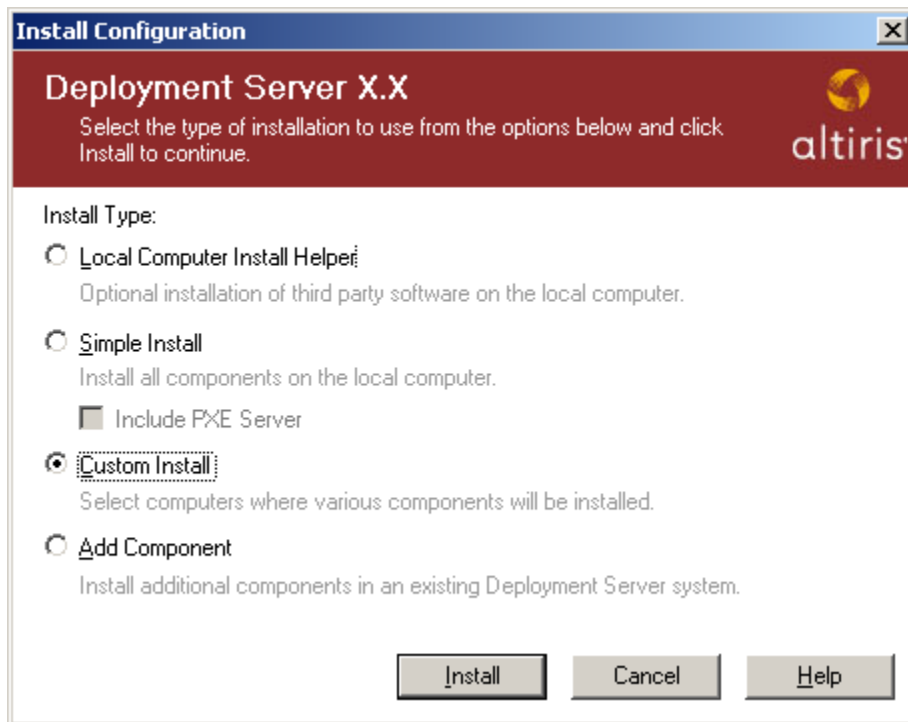
To install the Altiris Deployment Solution in a multi-server deployment infrastructure:

1. Click **(1) Altiris Deployment Solution** from the left pane of the autorun menu, and then click **Step 1: Install Altiris Deployment Solution X.X**, where X.X is the software version.

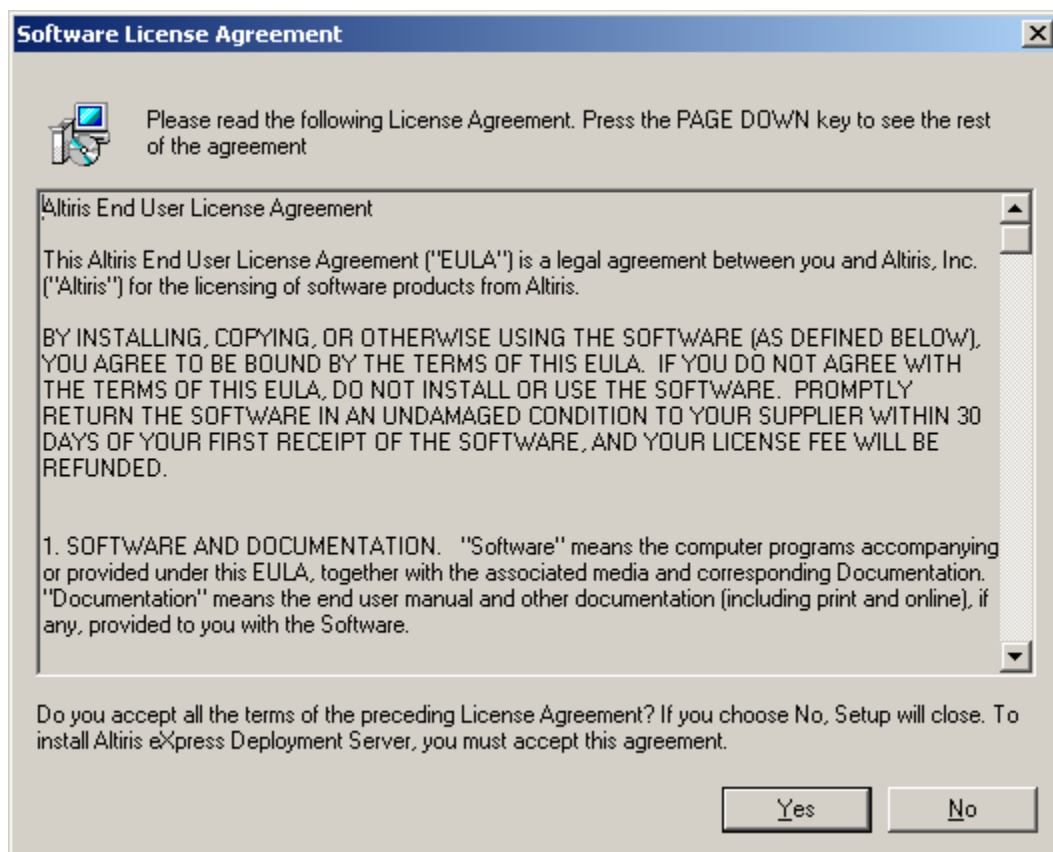


2. If Microsoft .NET Framework is not installed:
 - a. Select **Local Computer Install Helper**.
 - b. Click **Install**.
 - c. Follow the onscreen instructions to install Microsoft .NET Framework. If you plan to use a remote SQL database, ignore the MSDE step in the Local Computer Install Helper.
 - d. After the installation is complete, reboot the server and restart the installation

3. Select **Custom Install**, and then click **Install** to begin the installation process.

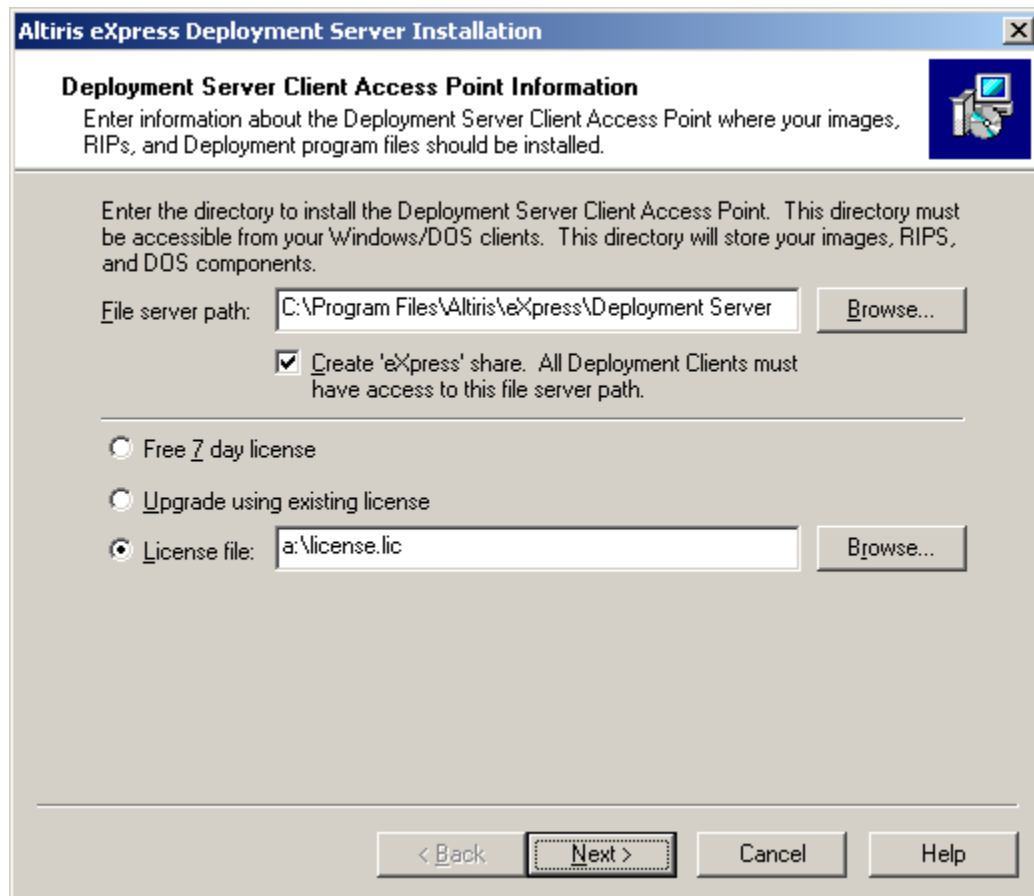


4. Read the license agreement. If you agree to the terms of the license agreement, click **Yes** to continue.



5. At the Deployment Server Client Access Point Information screen, enter the user-specified information as appropriate, and then click **Next**.
 - **File server path**—This is the Altiris default installation directory. Accept the default path of .\program files\altiris\express\deployment server.

NOTE: Specify a drive with enough available space to hold the disk images to be captured and deployed.
 - **Create eXpress share**—Be sure that this checkbox is selected (default).
 - **License file**—Select **Free 7 day license**, or select **License file** and enter the license file path and name. For more information, refer to Chapter 1 of this guide.

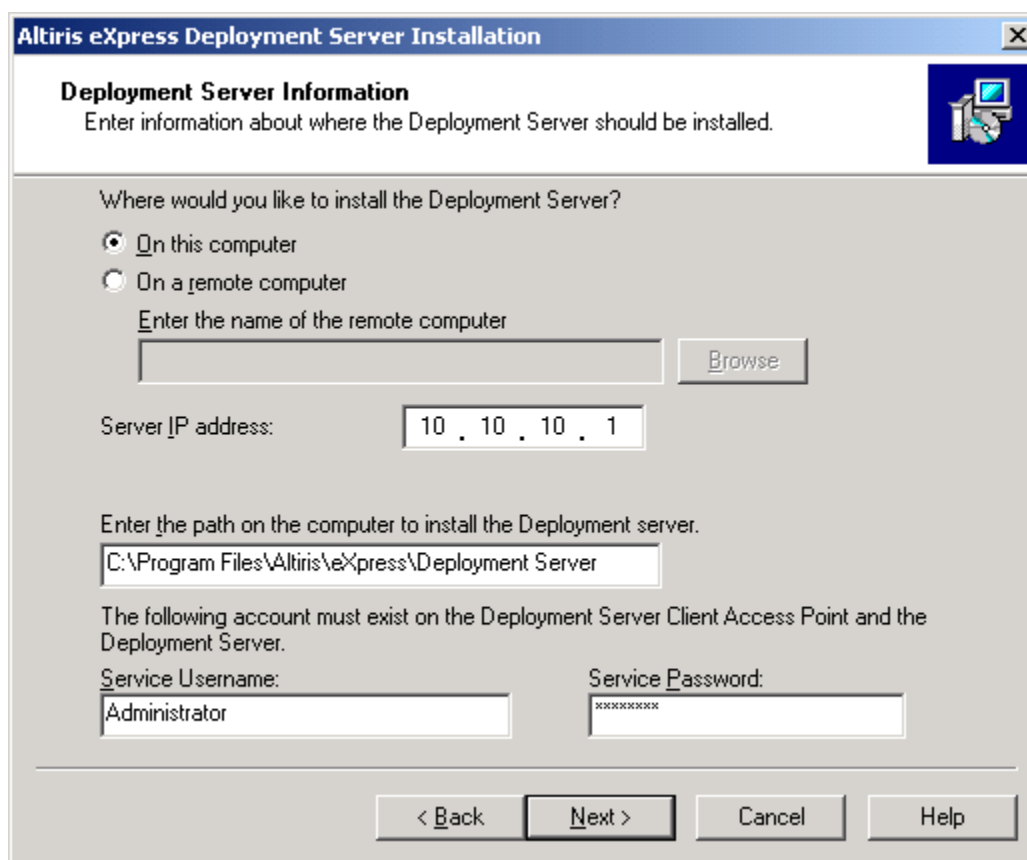


The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Deployment Server Client Access Point Information". Below the heading is a descriptive text: "Enter information about the Deployment Server Client Access Point where your images, RIPS, and Deployment program files should be installed." To the right of this text is a small icon of a computer with a disk. The main area of the dialog contains the following elements:

- A text prompt: "Enter the directory to install the Deployment Server Client Access Point. This directory must be accessible from your Windows/DOS clients. This directory will store your images, RIPS, and DOS components."
- A "File server path:" label followed by a text box containing "C:\Program Files\Altiris\express\Deployment Server" and a "Browse..." button.
- A checked checkbox labeled "Create 'eXpress' share. All Deployment Clients must have access to this file server path."
- Three radio button options for licensing:
 - ☐ Free 7 day license
 - ☐ Upgrade using existing license
 - ☒ License file: [a:\license.lic] [Browse...]

At the bottom of the dialog are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

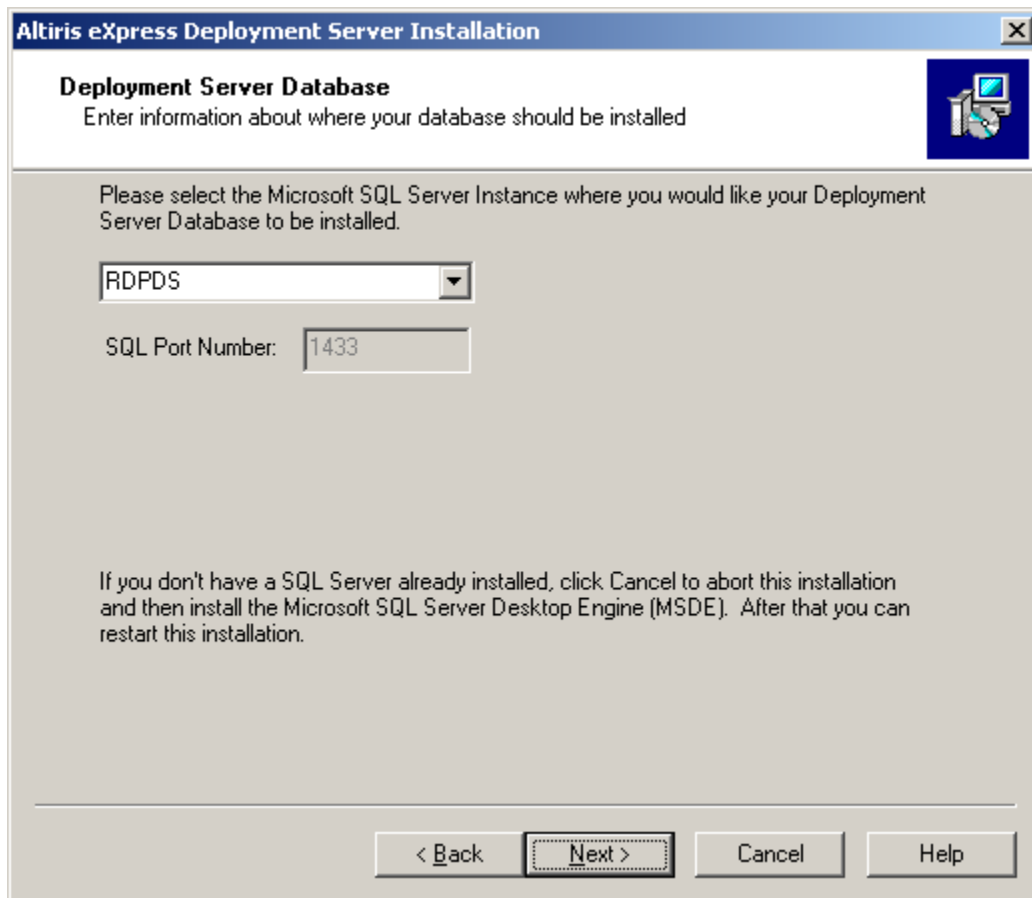
6. At the Deployment Server Information screen, enter the user-specific information as appropriate, and then click **Next**.
 - a. Select **On this computer** to install the Deployment Server on the local computer, or select **On a remote computer** and enter the computer name of the remote computer to install the Deployment Server on an existing server.
 - b. Enter the IP address of the interface that the Deployment Server will use.
 - c. Enter the directory path where the Deployment Server files are installed. This should be the same location as used in the previous screen (accept the default).
 - d. Enter the **Service Username** and **Service Password** of the Administrator account.



The screenshot shows the 'Altiris eXpress Deployment Server Installation' window. The title bar is blue with the text 'Altiris eXpress Deployment Server Installation'. Below the title bar is a header area with the text 'Deployment Server Information' and a sub-instruction 'Enter information about where the Deployment Server should be installed.' To the right of the header is a small icon of a computer with a monitor and a disk. The main area of the window is light gray and contains the following fields and controls:

- A question: 'Where would you like to install the Deployment Server?'
- Two radio buttons: 'On this computer' (selected) and 'On a remote computer'.
- A text box labeled 'Enter the name of the remote computer' with a 'Browse' button to its right.
- A label 'Server IP address:' followed by a text box containing '10 . 10 . 10 . 1'.
- A label 'Enter the path on the computer to install the Deployment server.' followed by a text box containing 'C:\Program Files\Altiris\eXpress\Deployment Server'.
- A label 'The following account must exist on the Deployment Server Client Access Point and the Deployment Server.'
- Two text boxes: 'Service Username:' containing 'Administrator' and 'Service Password:' containing 'xxxxxxx'.
- Four buttons at the bottom: '< Back', 'Next >', 'Cancel', and 'Help'.

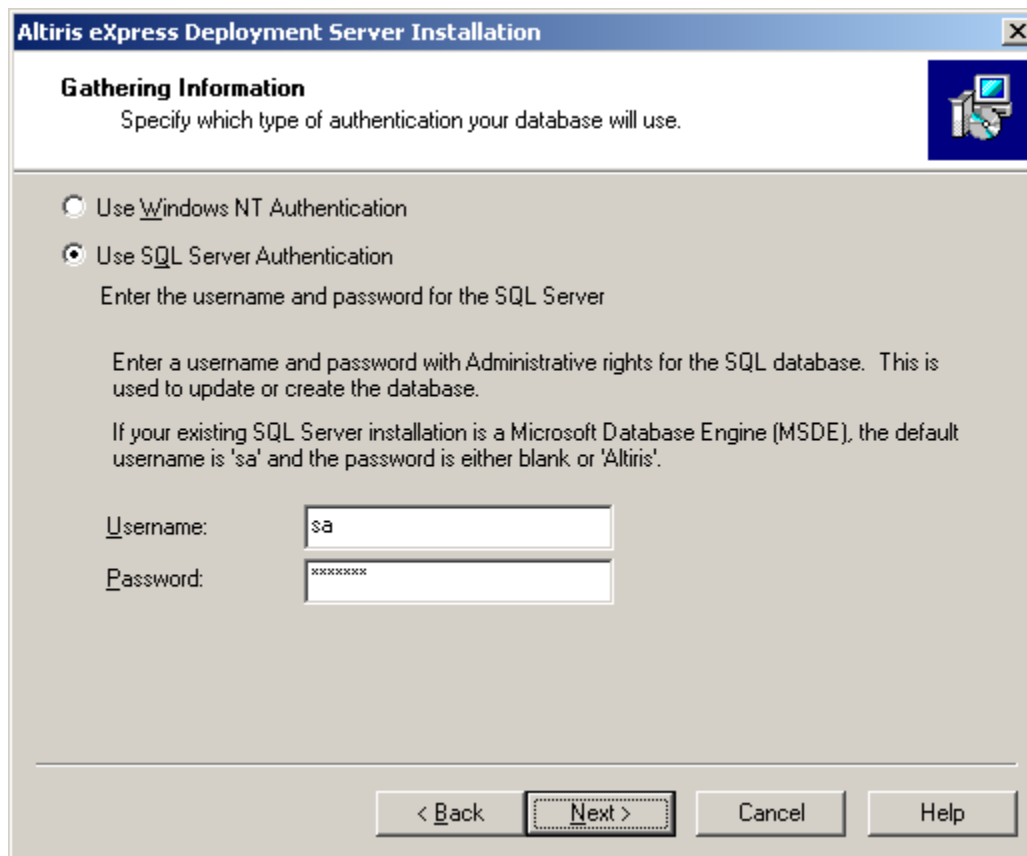
- At the Deployment Server Database screen, enter the name of the server where the database is located, and then click **Next**. If the database is located on the Deployment Server, the server name appears by default.



The screenshot shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Deployment Server Database" with a sub-instruction: "Enter information about where your database should be installed". A small icon of a computer with a monitor is in the top right corner. The main text area says: "Please select the Microsoft SQL Server Instance where you would like your Deployment Server Database to be installed." Below this is a dropdown menu showing "RDPDS" and a text box labeled "SQL Port Number:" containing "1433". A note at the bottom states: "If you don't have a SQL Server already installed, click Cancel to abort this installation and then install the Microsoft SQL Server Desktop Engine (MSDE). After that you can restart this installation." At the bottom are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

NOTE: If the database is located on a remote server, you might be prompted for authentication. Enter a user name and password with administrative rights.

8. If you selected to install to an existing SQL database, the Gathering Information screen appears, allowing the name and password for accessing the SQL server to be entered. If a unique name and password has been specified during SQL install, it can be entered here. Enter the appropriate SQL user name and password in the fields provided, and then click **Next** to continue.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Gathering Information" with a subtitle "Specify which type of authentication your database will use." There are two radio button options: "Use Windows NT Authentication" (unselected) and "Use SQL Server Authentication" (selected). Below the selected option, it says "Enter the username and password for the SQL Server". A paragraph of instructions follows: "Enter a username and password with Administrative rights for the SQL database. This is used to update or create the database. If your existing SQL Server installation is a Microsoft Database Engine (MSDE), the default username is 'sa' and the password is either blank or 'Altiris'." Below this, there are two text input fields: "Username:" with "sa" entered, and "Password:" with "xxxxxxx" entered. At the bottom, there are four buttons: "< Back", "Next >" (highlighted with a dashed border), "Cancel", and "Help".

Altiris eXpress Deployment Server Installation

Gathering Information
Specify which type of authentication your database will use.

☐ Use Windows NT Authentication

☒ Use SQL Server Authentication
Enter the username and password for the SQL Server

Enter a username and password with Administrative rights for the SQL database. This is used to update or create the database.

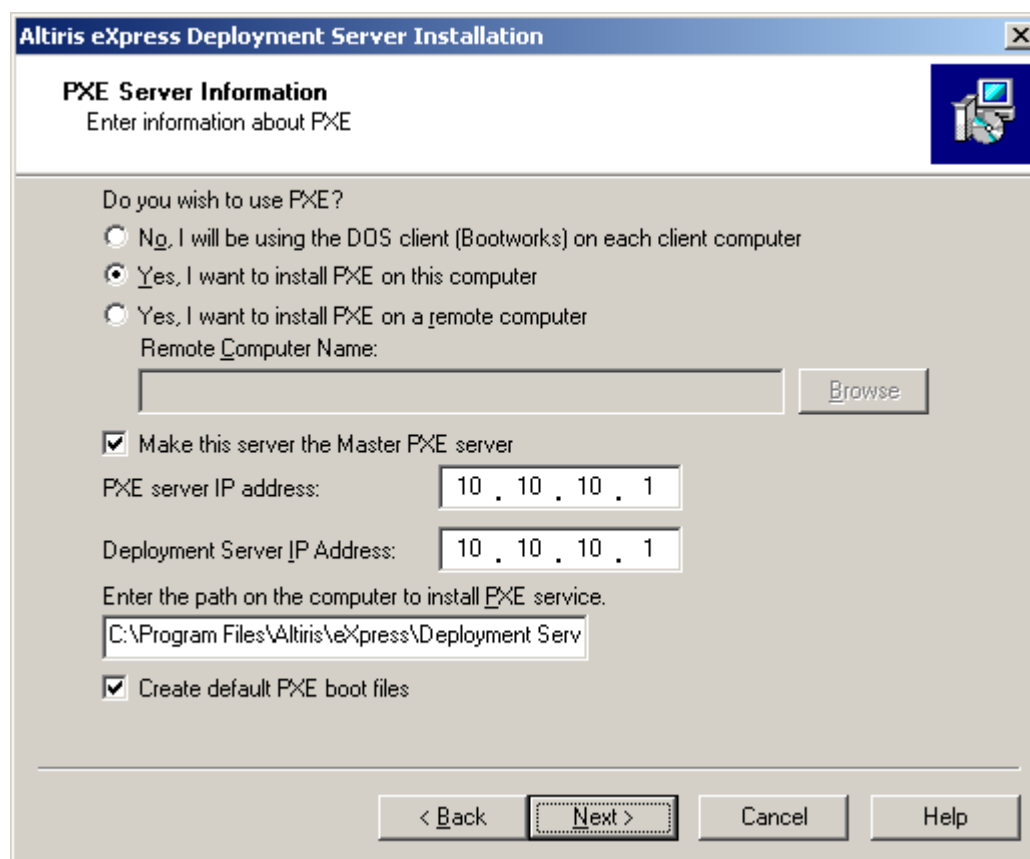
If your existing SQL Server installation is a Microsoft Database Engine (MSDE), the default username is 'sa' and the password is either blank or 'Altiris'.

Username:

Password:

< Back **Next >** Cancel Help

- At the PXE Server Information screen, select your PXE options. Be sure that **Make this server the Master PXE server** and **Create default PXE boot files** are selected, and then click **Next** to continue.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "PXE Server Information" with the subtitle "Enter information about PXE". The dialog contains several configuration options for PXE booting. It starts with a question "Do you wish to use PXE?" and three radio button options: "No, I will be using the DOS client (Bootworks) on each client computer", "Yes, I want to install PXE on this computer" (which is selected), and "Yes, I want to install PXE on a remote computer". Below the radio buttons is a text field for "Remote Computer Name:" and a "Browse" button. Further down, there is a checked checkbox for "Make this server the Master PXE server". Below this are two IP address fields: "PXE server IP address:" and "Deployment Server IP Address:", both containing the value "10 . 10 . 10 . 1". The next section is "Enter the path on the computer to install PXE service." with a text field containing "C:\Program Files\Altiris\Express\Deployment Serv". At the bottom, there is a checked checkbox for "Create default PXE boot files". The dialog concludes with four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

Altiris eXpress Deployment Server Installation

PXE Server Information
Enter information about PXE

Do you wish to use PXE?

- ☐ No, I will be using the DOS client (Bootworks) on each client computer
- ☒ Yes, I want to install PXE on this computer
- ☐ Yes, I want to install PXE on a remote computer

Remote Computer Name:

☒ Make this server the Master PXE server

PXE server IP address:

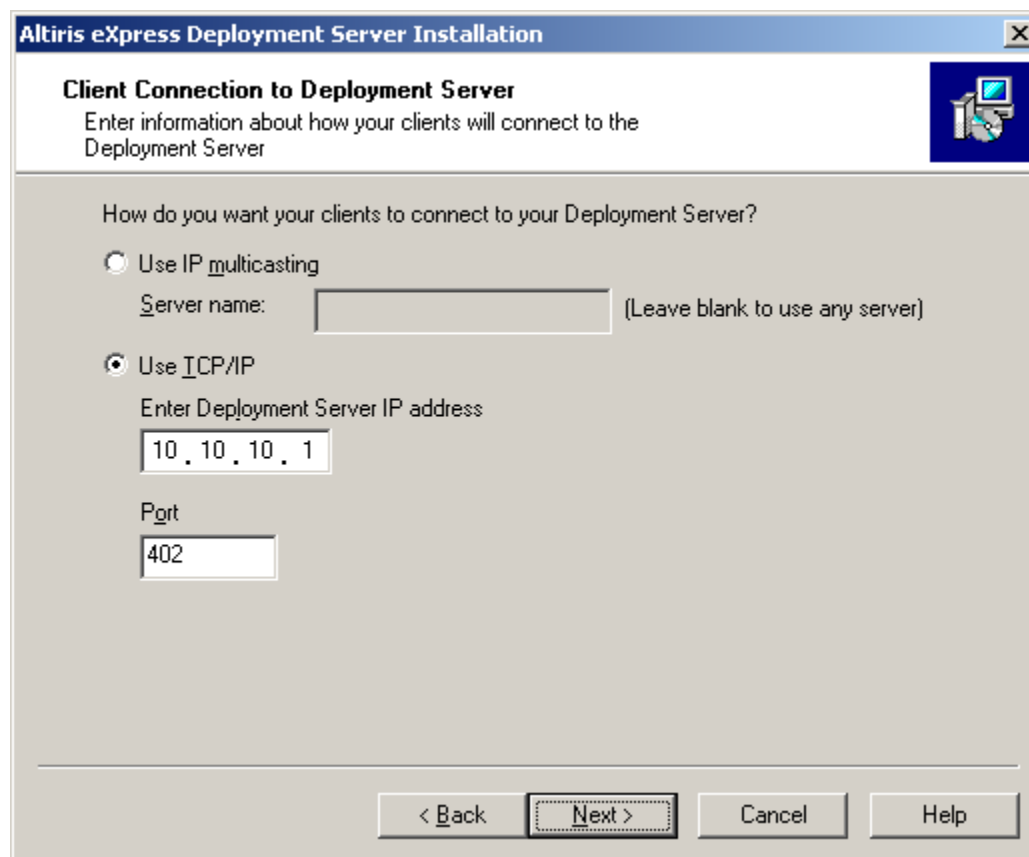
Deployment Server IP Address:

Enter the path on the computer to install PXE service.

☒ Create default PXE boot files

< Back **Next >** Cancel Help

10. At the Client Connection to Deployment Server screen, specify how the client will connect to the Deployment Server, and then click **Next** to continue.
 - a. Select **Use TCP/IP** to be sure that the clients connect directly to the Deployment Server.
 - b. Be sure that the IP address is correct for the Deployment Server.



The screenshot shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Client Connection to Deployment Server" with a sub-instruction: "Enter information about how your clients will connect to the Deployment Server". There is a small icon of a computer with a network card in the top right corner.

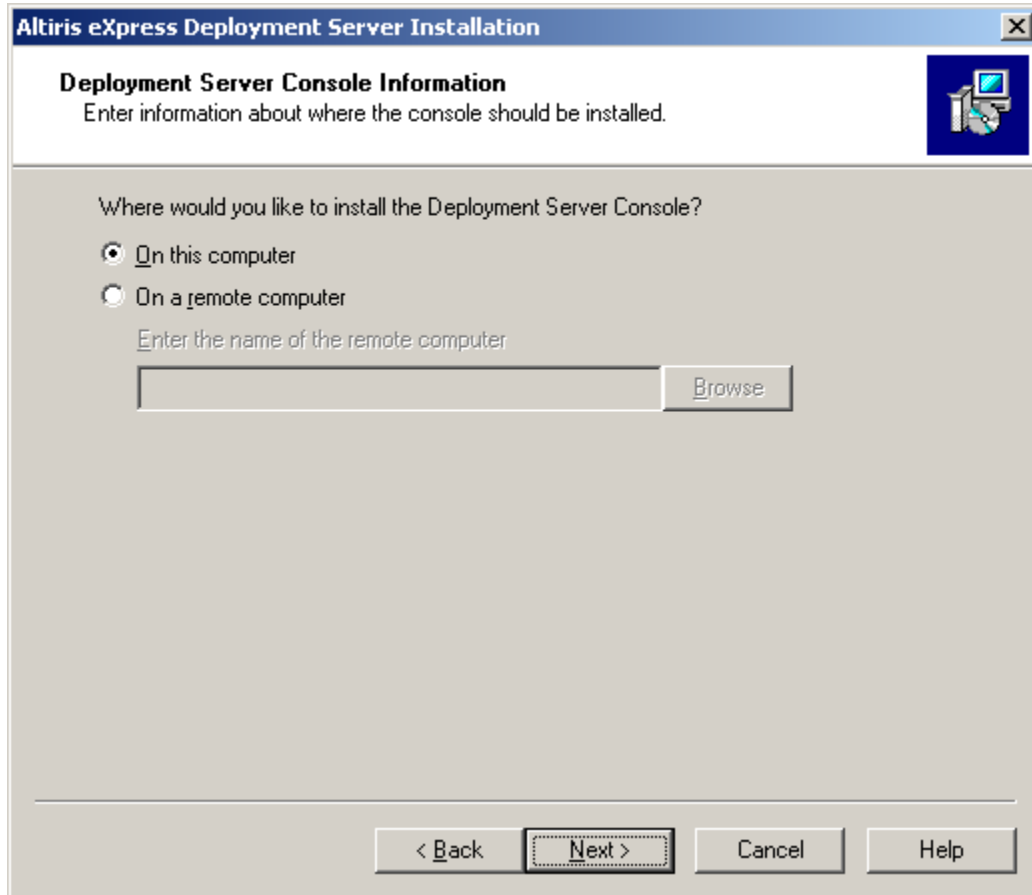
The question posed is "How do you want your clients to connect to your Deployment Server?". There are two radio button options:

- ☐ Use IP multicasting
Below this is a text field labeled "Server name:" followed by a blank text box and the instruction "(Leave blank to use any server)".
- ☒ Use TCP/IP
Below this is the instruction "Enter Deployment Server IP address" followed by a text box containing "10 . 10 . 10 . 1".

Below the IP address field is a text field labeled "Port" containing the value "402".

At the bottom of the dialog are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

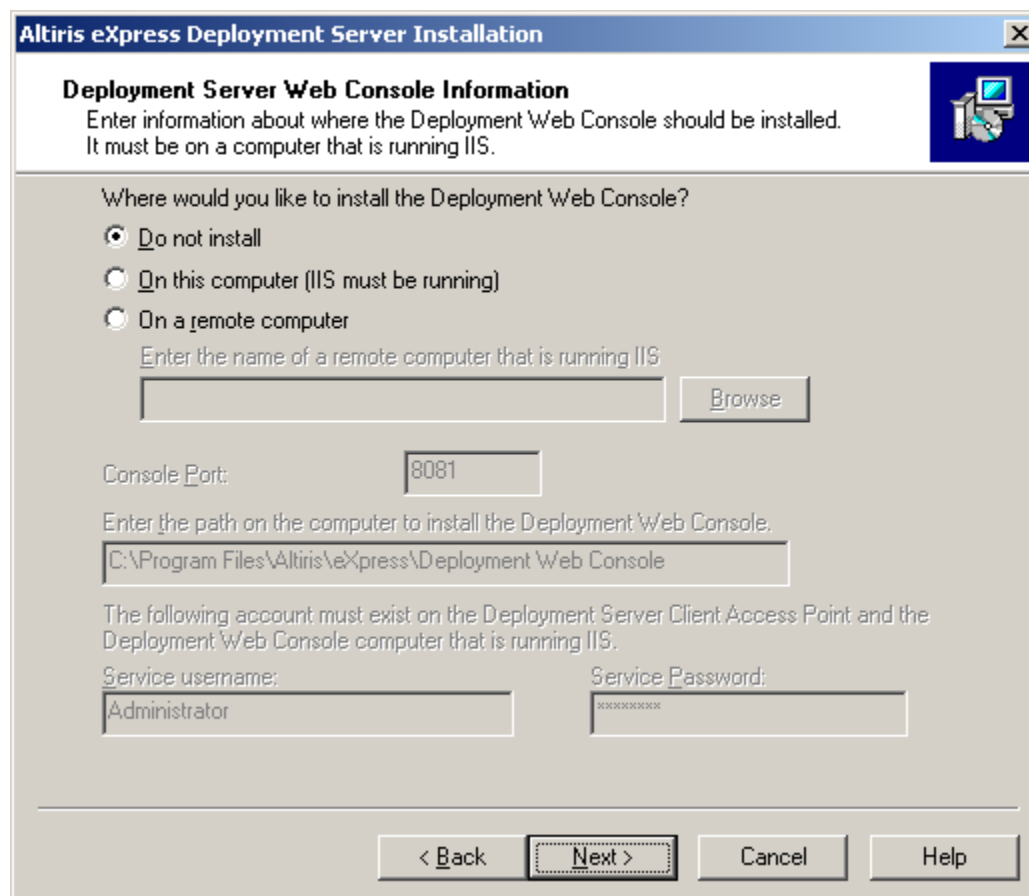
11. At the Deployment Server Console Information screen, determine the GUI console location, and then click **Next** to continue.
 - a. If the console will be on the current Deployment Server, select **On this computer**.
 - b. If the console will be on a remote computer, select **On a remote computer**, and enter the name of the remote computer.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Deployment Server Console Information" with a subtitle "Enter information about where the console should be installed." and a small icon of a computer with a monitor. The question "Where would you like to install the Deployment Server Console?" is followed by two radio button options: "On this computer" (which is selected) and "On a remote computer". Below the "On a remote computer" option is a text input field with the placeholder text "Enter the name of the remote computer" and a "Browse" button to its right. At the bottom of the dialog are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

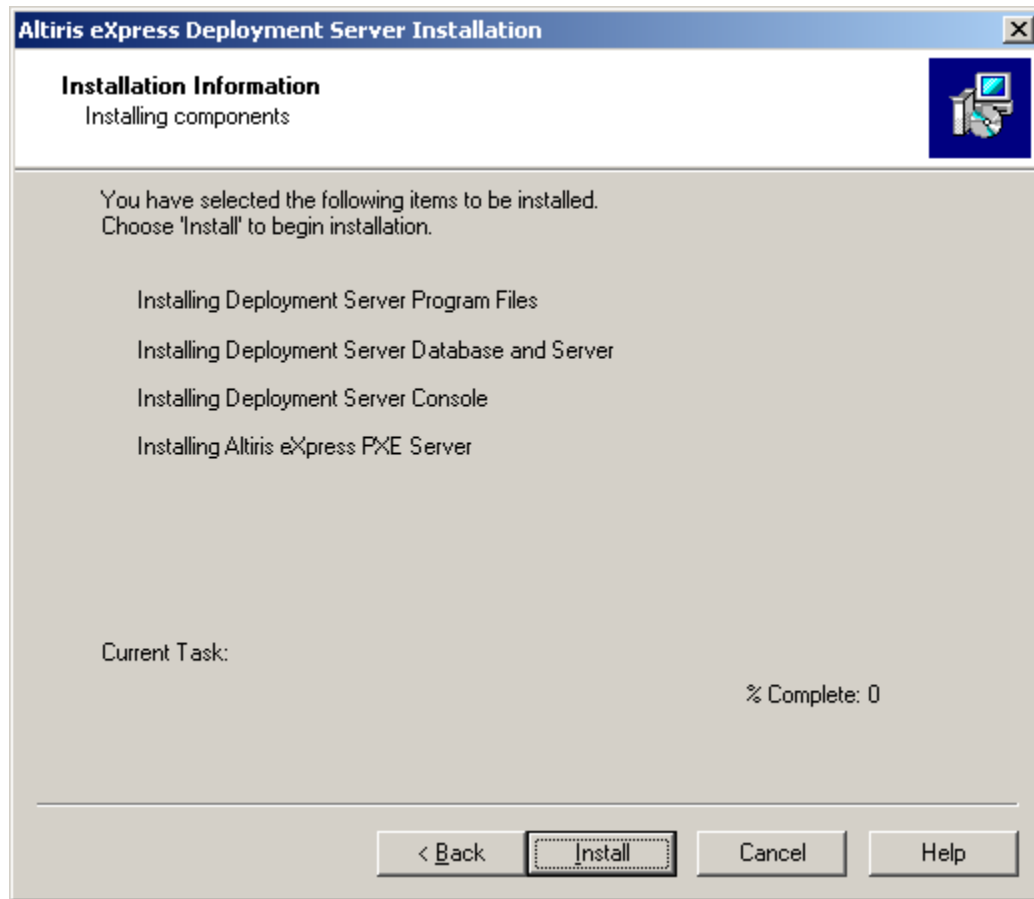
12. If the Deployment Server Web Console will be used, verify that Internet Information Service is installed and running on the computer where the service is to be installed. Select either **On this computer** or **On a remote computer**, and click **Next** to continue.

If the Deployment Server Web Console will not be used, select **Do not install**, and then click **Next** to continue.

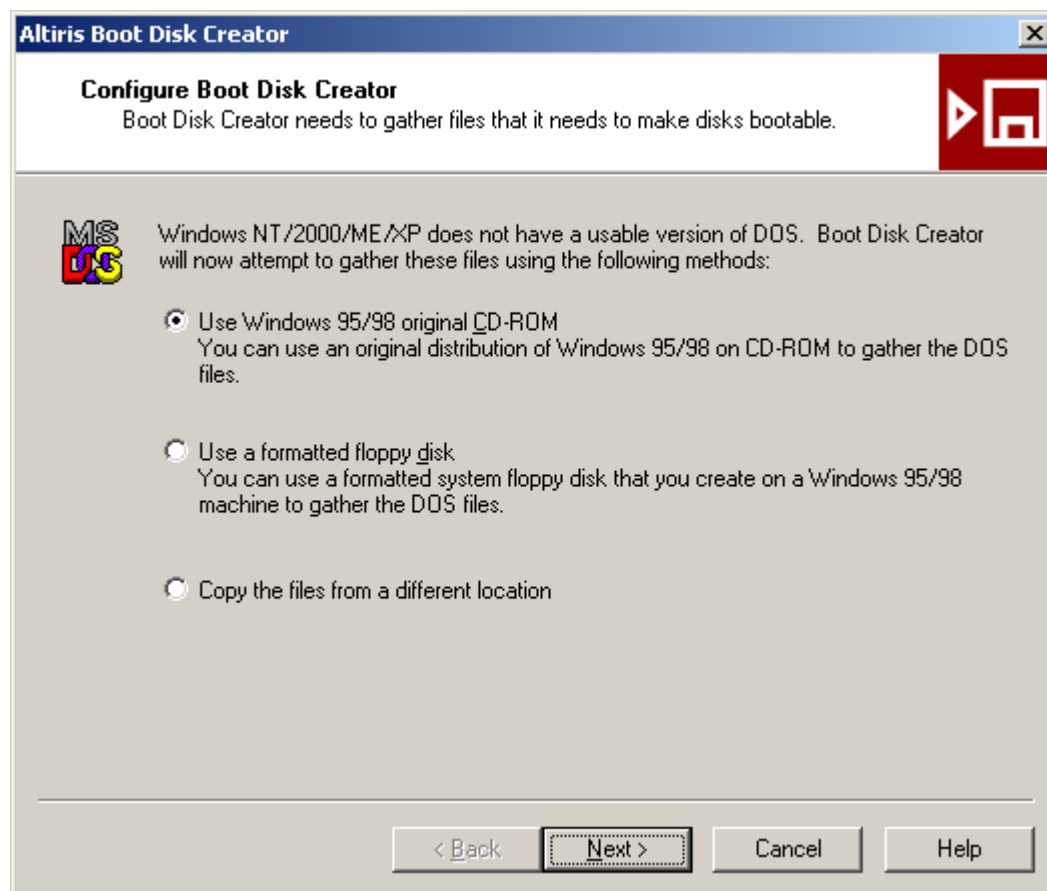


The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". It contains a section titled "Deployment Server Web Console Information" with a sub-instruction: "Enter information about where the Deployment Web Console should be installed. It must be on a computer that is running IIS." Below this, there are three radio button options: "Do not install" (which is selected), "On this computer (IIS must be running)", and "On a remote computer". Under the "On a remote computer" option, there is a text field for "Enter the name of a remote computer that is running IIS" and a "Browse" button. Further down, there is a "Console Port:" label and a text field containing "8081". Below that is a text field for "Enter the path on the computer to install the Deployment Web Console." containing "C:\Program Files\Altiris\eXpress\Deployment Web Console". A note states: "The following account must exist on the Deployment Server Client Access Point and the Deployment Web Console computer that is running IIS." Below this note are two text fields: "Service username:" containing "Administrator" and "Service Password:" containing a masked password. At the bottom of the dialog are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

13. Click **Install** at the Installation Information screen. The Deployment Server software installation begins.



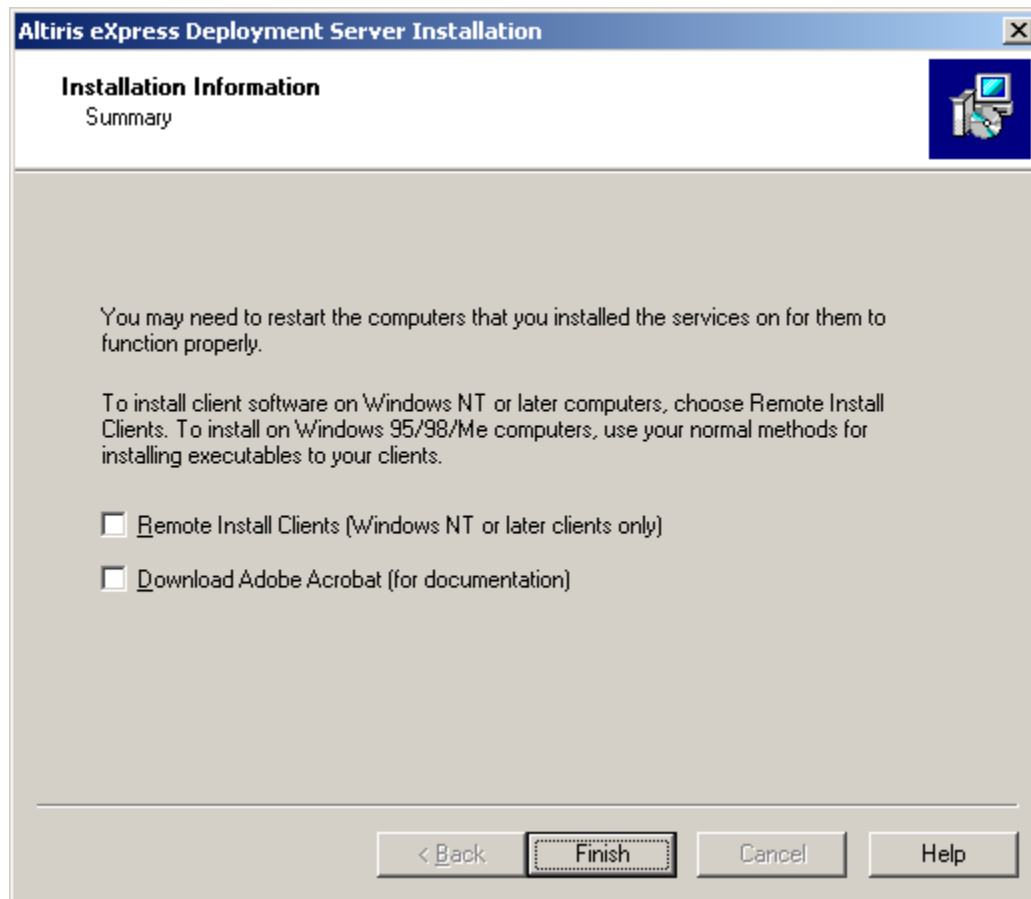
14. During the installation, you are prompted for either a Windows 9x boot diskette, CD, or a location from which to extract several DOS files to create PXE images and boot diskettes. Specify the appropriate location from which to extract files, and then click **Next**. Follow the prompts to install the DOS files.



IMPORTANT: If DOS files are provided from a diskette, the installation program might also prompt for optional DOS files. To omit copying the optional DOS files, select **No longer prompt for optional files**, and then click **Finish**.

15. If the Windows 9x CD was used to install DOS files when prompted, reinsert the Rapid Deployment Pack—Windows Edition CD in the CD-ROM drive when prompted to continue the Deployment Solution installation.

16. Click **Finish**.



ProLiant Integration Module for Deployment Server

To install the ProLiant Integration Module for Deployment Server on the Deployment Server, follow the steps in the “ProLiant Integration Module for Deployment Server” section under “Basic Installation.”

IMPORTANT: When a custom installation of the Altiris Deployment Solution is performed, the ProLiant Integration Module for Deployment Server must be installed on the same machine on which the Deployment Server Console component was installed.

ProLiant Integration Module for NFS Server

To install the ProLiant Integration Module for NFS server on a Linux server for Linux scripted installations, follow the steps in the “ProLiant Integration Module for NFS Server” section under “Basic Installation.”

Upgrading

IMPORTANT: Shut down the Deployment Server Console before attempting to upgrade the Rapid Deployment Pack software.

To upgrade the Rapid Deployment Pack software currently installed on the Deployment Server:

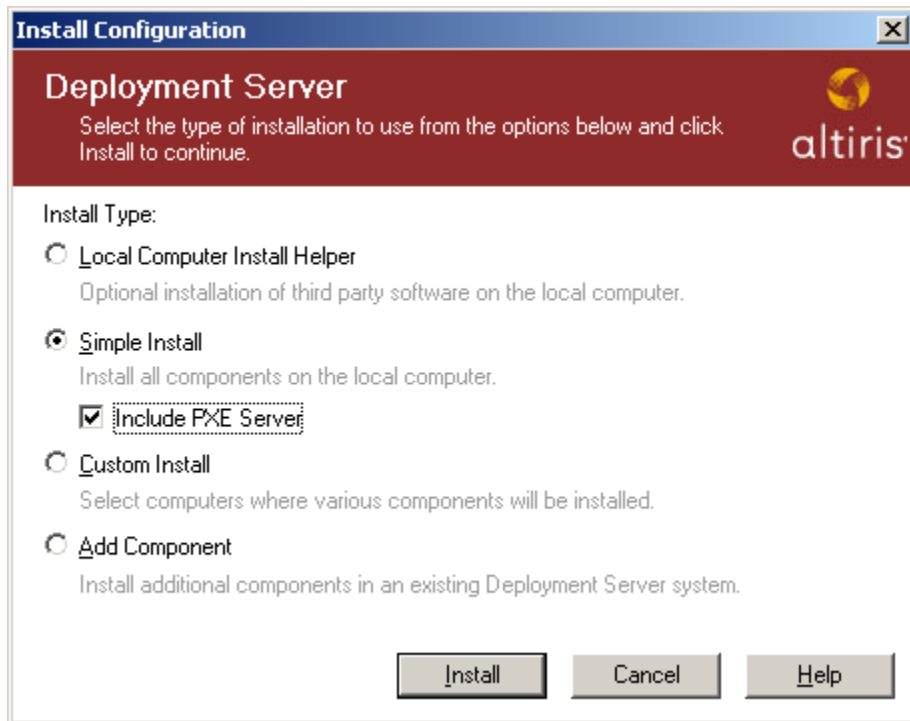
1. Insert the Rapid Deployment Pack—Windows Edition CD into the Deployment Server. An autorun menu appears.
2. Read the license agreement. If you agree to the terms of the license agreement, click **Agree** to continue.

Altiris Deployment Solution

IMPORTANT: If you obtained your existing licenses before 11/20/2003, you should have received a new license file validating your licenses for an Altiris 6.0 software upgrade and providing 10-year Annual Upgrade Protection. Apply this new license file with the Altiris License Utility before upgrading to the Rapid Deployment Pack 1.50 or later. If you did not receive this license file, contact HP support before upgrading. Upgrading before applying a new license file can cause your existing licenses to become invalid, resulting in a reduced license count (possibly to zero).

1. From the Software Upgrades page, click **Altiris Deployment Solution x.x**, where x.x is the software version.
2. If Microsoft .NET Framework is not installed:
 - a. Select **Local Computer Install Helper**.
 - b. Click **Install**.
 - c. Follow the onscreen instructions to install Microsoft .NET Framework. If you plan to use a remote SQL database, ignore the MSDE step in the Local Computer Install Helper.
 - a. After the installation is complete, reboot the server and restart the installation.

3. Select the same installation method used for the initial installation (either **Simple Install** or **Custom Install**). If selecting **Simple Install**, select the **Include PXE Server** checkbox.



4. Click **Install** to begin the upgrade process. Refer to “Simple Install” or “Custom Install” to complete the Deployment Solution upgrade.

Simple Install

1. At the Deployment Server Client Access Point Information screen, select **Upgrade using existing license** to use your current licenses, enter the appropriate Service user name and Service password, and then click **Next**.

IMPORTANT: If you obtained your existing licenses before 11/20/2003, you should have received a new license file validating your licenses for an Altiris 6.0 software upgrade and providing 10-year Annual Upgrade Protection. Apply this new license file with the Altiris License Utility before upgrading to the Rapid Deployment Pack 1.50 or later. If you did not receive this license file, contact HP support before upgrading. Upgrading before applying a new license file can cause your existing licenses to become invalid, resulting in a reduced license count (possibly to zero).

Altiris eXpress Deployment Server Installation

Deployment Server Client Access Point Information
Enter information about the Deployment Server Client Access Point where your images, RIPs, and Deployment program files should be installed.

Enter the directory to install the Deployment Server Client Access Point. This directory must be accessible from your Windows/DOS clients. This directory will store your images, RIPS, and DOS components.

File server path:

☒ Create 'eXpress' share. All Deployment Clients must have access to this file server path.

☐ Free 7 day license

☒ Upgrade using existing license

☐ License file:

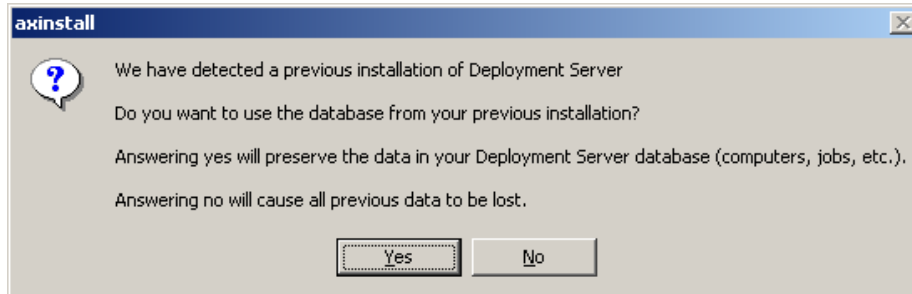
The following account must exist on the Deployment Server Client Access Point and the Deployment Server.

Service username: Service password:

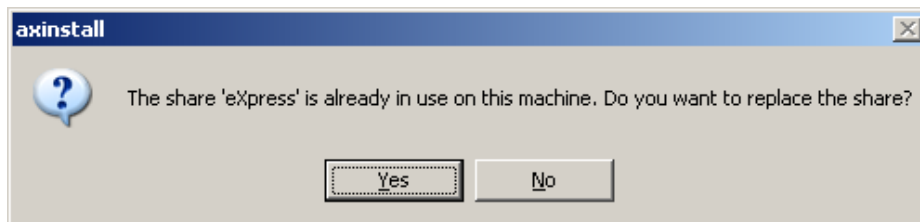
< Back Cancel

- When prompted to select if you want to use the database from the previous version of the Altiris Deployment Solution, click **Yes** to keep all of the data intact.

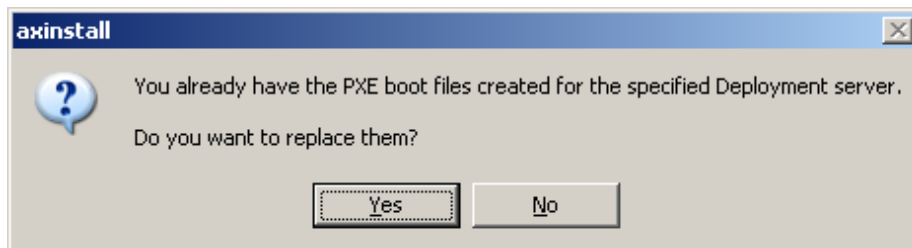
IMPORTANT: If you do not keep the existing database, all deployment history, customized jobs, and servers listed in the Deployment Server Console are lost.



- Click **Install** at the Installation Information screen to begin the software installation.
- When prompted to replace the eXpress share, click **Yes**.



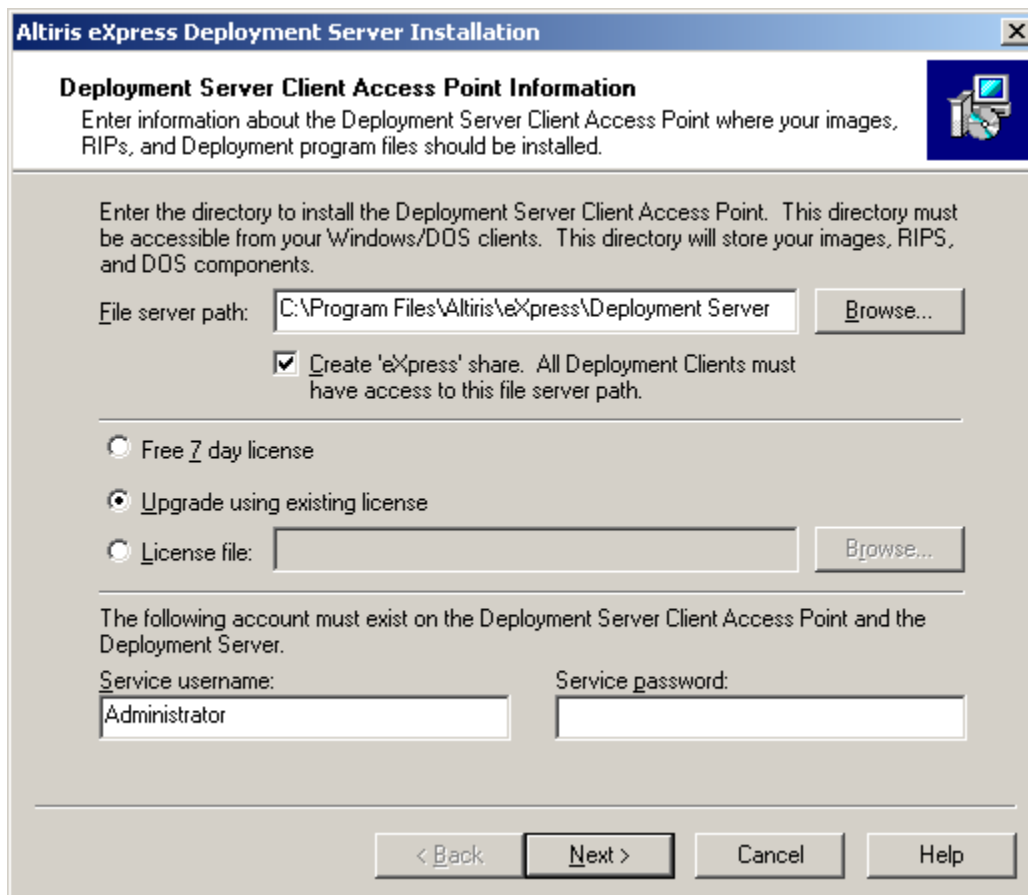
- When prompted to recreate the boot images, click **Yes**.



- Click **Finish** at the Installation Information Summary screen.

Custom Install

1. At the Deployment Server Client Access Point Information screen, select **Upgrade using existing license** to use your current licenses, and then click **Next**.



Altiris eXpress Deployment Server Installation

Deployment Server Client Access Point Information
Enter information about the Deployment Server Client Access Point where your images, RIPs, and Deployment program files should be installed.

Enter the directory to install the Deployment Server Client Access Point. This directory must be accessible from your Windows/DOS clients. This directory will store your images, RIPS, and DOS components.

File server path:

☒ Create 'eXpress' share. All Deployment Clients must have access to this file server path.

☐ Free 7 day license

☒ Upgrade using existing license

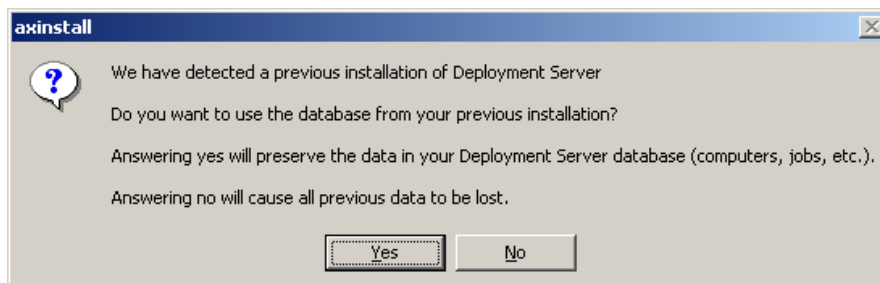
☐ License file:

The following account must exist on the Deployment Server Client Access Point and the Deployment Server.


Service username: Service password:

2. When prompted to select if you want to use the database from the previous version of the Altiris Deployment Solution, click **Yes** to keep all of the data intact.

IMPORTANT: If you do not keep the existing database, all deployment history, customized jobs, and servers listed in the Deployment Server Console are lost.



axinstall

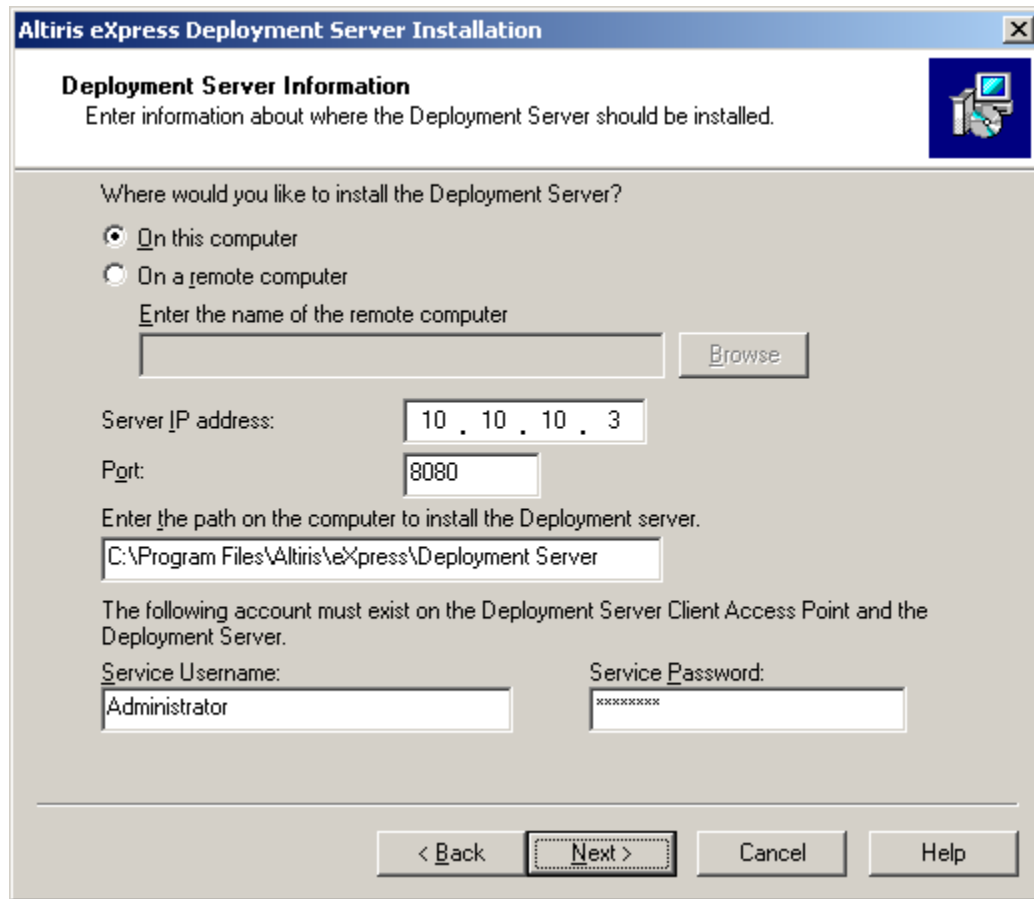
 We have detected a previous installation of Deployment Server

Do you want to use the database from your previous installation?

Answering yes will preserve the data in your Deployment Server database (computers, jobs, etc.).

Answering no will cause all previous data to be lost.

3. At the Deployment Server Information screen, complete the console location information as appropriate, and then click **Next**.



The screenshot shows the 'Altiris eXpress Deployment Server Installation' window. The title bar is blue with the text 'Altiris eXpress Deployment Server Installation' and a close button. Below the title bar is a header section with the title 'Deployment Server Information' and a subtitle 'Enter information about where the Deployment Server should be installed.' To the right of the subtitle is a small icon of a computer monitor and a server tower. The main content area is light gray and contains the following elements: A question 'Where would you like to install the Deployment Server?' followed by two radio buttons: 'On this computer' (selected) and 'On a remote computer'. Below the radio buttons is a text box labeled 'Enter the name of the remote computer' and a 'Browse' button. Below that is a 'Server IP address:' label followed by a text box containing '10 . 10 . 10 . 3'. Below that is a 'Port:' label followed by a text box containing '8080'. Below that is a label 'Enter the path on the computer to install the Deployment server.' followed by a text box containing 'C:\Program Files\Altiris\Express\Deployment Server'. Below that is a paragraph: 'The following account must exist on the Deployment Server Client Access Point and the Deployment Server.' followed by two labels: 'Service Username:' and 'Service Password:'. Below 'Service Username:' is a text box containing 'Administrator'. Below 'Service Password:' is a text box containing 'xxxxxxxx'. At the bottom of the window are four buttons: '< Back', 'Next >' (highlighted with a dashed border), 'Cancel', and 'Help'.

Altiris eXpress Deployment Server Installation

Deployment Server Information
Enter information about where the Deployment Server should be installed.

Where would you like to install the Deployment Server?

☒ On this computer
☐ On a remote computer

Enter the name of the remote computer

Server IP address:

Port:

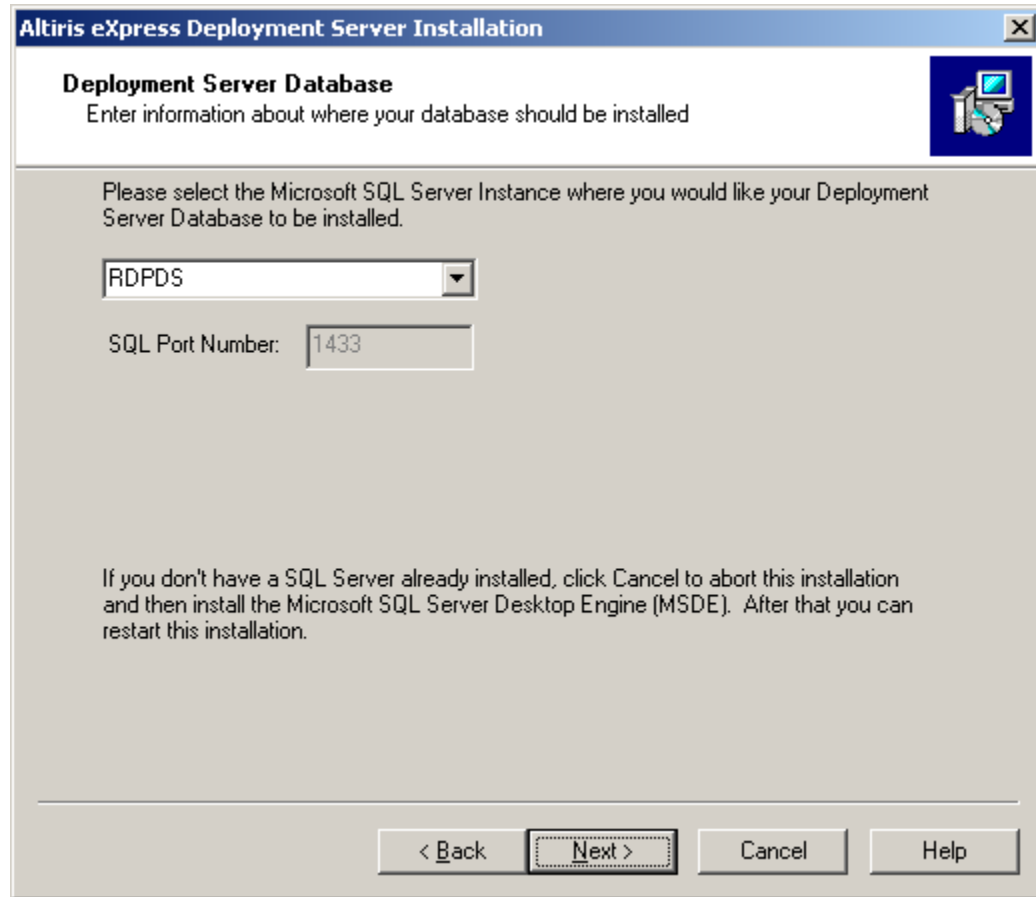
Enter the path on the computer to install the Deployment server.

The following account must exist on the Deployment Server Client Access Point and the Deployment Server.

Service Username: Service Password:

< Back **Next >** Cancel Help

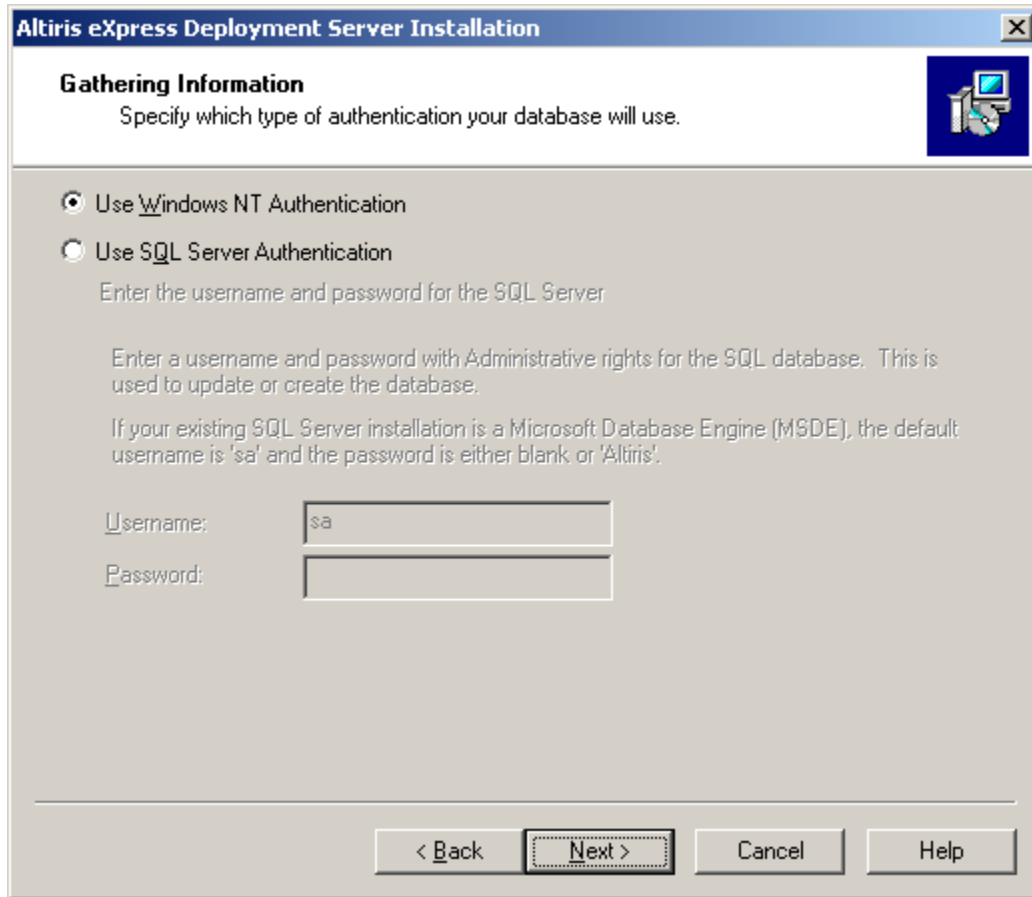
4. At the Deployment Server Database screen, enter the name of the server where the database is located, and then click **Next**.



The screenshot shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Deployment Server Database" with a sub-instruction "Enter information about where your database should be installed". A small icon of a computer with a monitor is in the top right. The main area contains the text "Please select the Microsoft SQL Server Instance where you would like your Deployment Server Database to be installed." Below this is a dropdown menu showing "RDPDS" and a text box labeled "SQL Port Number:" containing "1433". At the bottom, there is a paragraph of text: "If you don't have a SQL Server already installed, click Cancel to abort this installation and then install the Microsoft SQL Server Desktop Engine (MSDE). After that you can restart this installation." At the very bottom are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

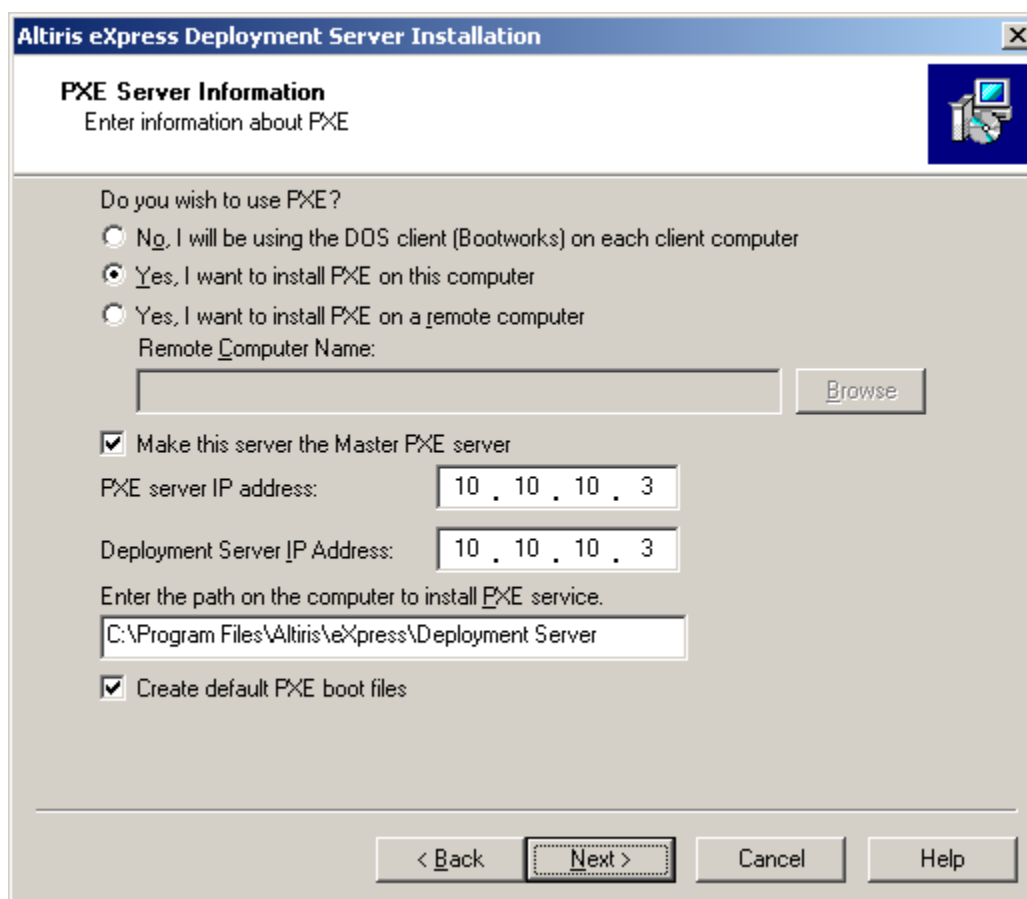
NOTE: If the database is located on a remote server, you might be prompted for authentication. Enter a user name and password with administrative rights.

5. If you have an existing SQL database, enter the appropriate SQL user name and password in the fields provided, and then click **Next** to continue.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Gathering Information", followed by the instruction "Specify which type of authentication your database will use." There are two radio button options: "Use Windows NT Authentication" (which is selected) and "Use SQL Server Authentication". Below the second option is a text prompt "Enter the username and password for the SQL Server". Further down, there is explanatory text: "Enter a username and password with Administrative rights for the SQL database. This is used to update or create the database." and "If your existing SQL Server installation is a Microsoft Database Engine (MSDE), the default username is 'sa' and the password is either blank or 'Altiris!'". At the bottom of the dialog, there are two input fields: "Username:" with the text "sa" entered, and "Password:" which is empty. At the very bottom, there are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

6. At the PXE Server Information screen, select your PXE options. Be sure that **Make this server the Master PXE server** and **Create default PXE boot files** are selected, and then click **Next** to continue.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". Inside, the "PXE Server Information" section prompts the user to "Enter information about PXE". It contains three radio buttons for PXE usage: "No, I will be using the DOS client (Bootworks) on each client computer", "Yes, I want to install PXE on this computer" (which is selected), and "Yes, I want to install PXE on a remote computer". Below the radio buttons is a text field for "Remote Computer Name:" with a "Browse" button. There are two checked checkboxes: "Make this server the Master PXE server" and "Create default PXE boot files". Two IP address fields are present, both containing "10 . 10 . 10 . 3", labeled "PXE server IP address:" and "Deployment Server IP Address:". A text field for the PXE service path contains "C:\Program Files\Altiris\Express\Deployment Server". At the bottom are four buttons: "< Back", "Next >" (highlighted with a dashed border), "Cancel", and "Help".

Altiris eXpress Deployment Server Installation

PXE Server Information
Enter information about PXE

Do you wish to use PXE?

- ☐ No, I will be using the DOS client (Bootworks) on each client computer
- ☒ Yes, I want to install PXE on this computer
- ☐ Yes, I want to install PXE on a remote computer

Remote Computer Name:

☒ Make this server the Master PXE server

PXE server IP address:

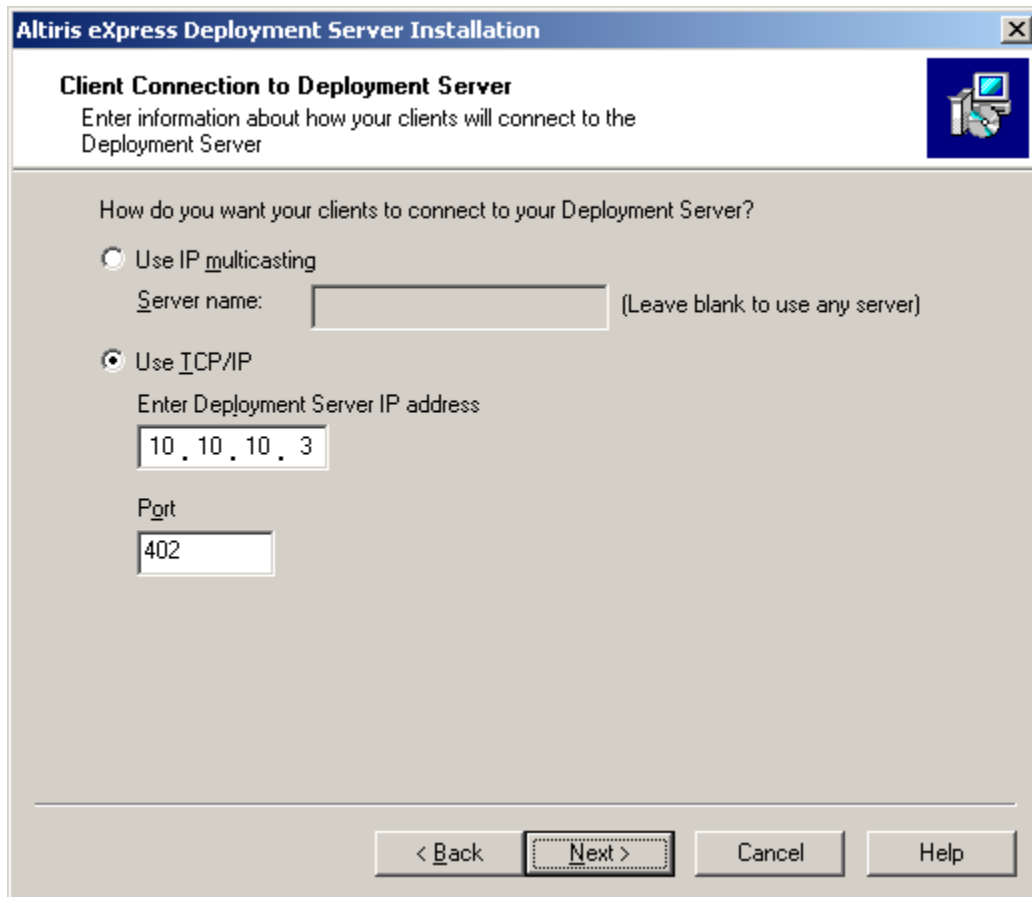
Deployment Server IP Address:

Enter the path on the computer to install PXE service.

☒ Create default PXE boot files

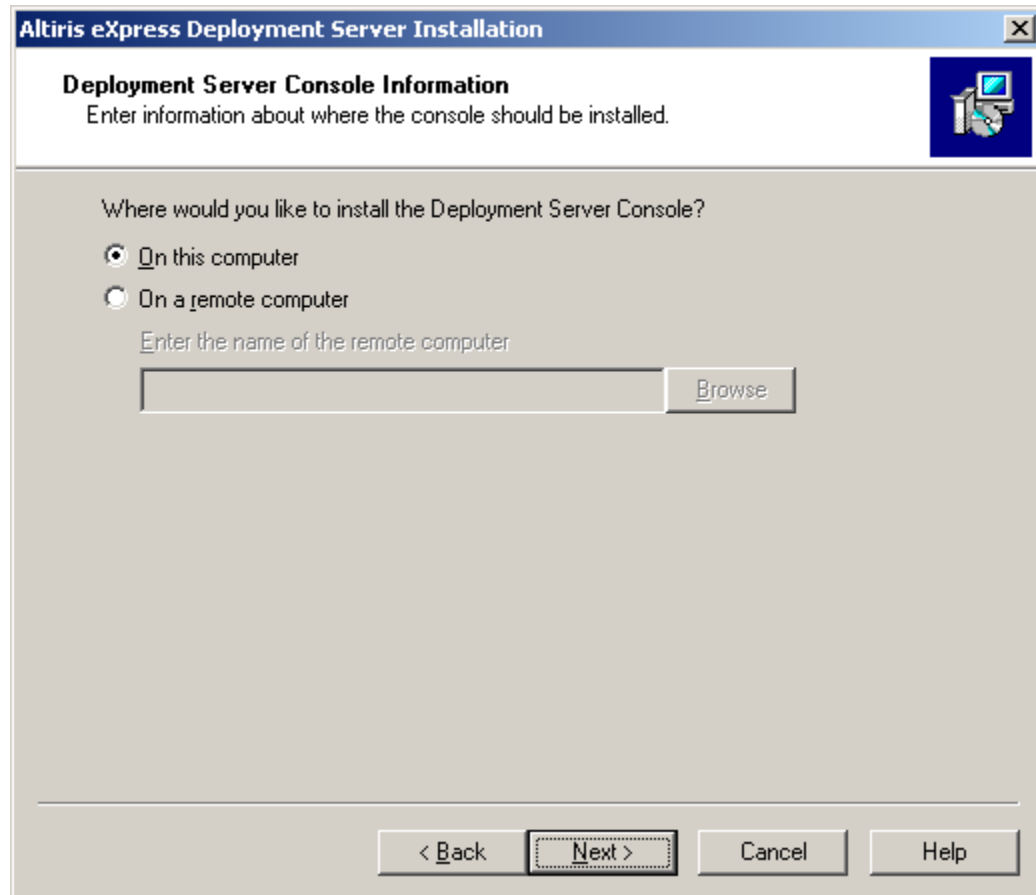
< Back Next > Cancel Help

7. At the Client Connection to Deployment Server screen, specify how the client connects to the Deployment Server, and then click **Next** to continue.
 - a. Select **Use TCP/IP** to be sure that the clients connect directly to the Deployment Server.
 - b. Be sure that the IP address is correct for the Deployment Server.



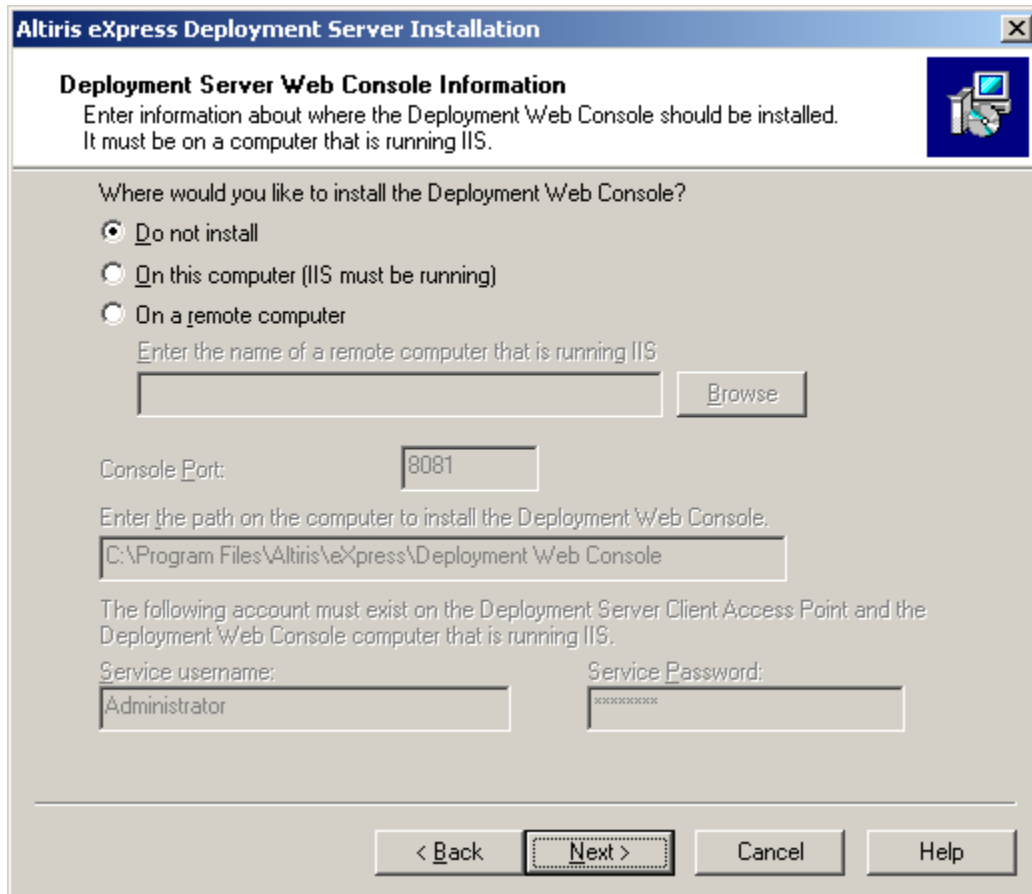
The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Client Connection to Deployment Server" with a subtitle "Enter information about how your clients will connect to the Deployment Server". There is a small icon of a computer and server in the top right corner. The main content area asks "How do you want your clients to connect to your Deployment Server?". There are two radio button options: "Use IP multicasting" and "Use TCP/IP". The "Use TCP/IP" option is selected. Below "Use IP multicasting" is a text field for "Server name:" with a placeholder "(Leave blank to use any server)". Below "Use TCP/IP" is a text field for "Enter Deployment Server IP address" containing the value "10 . 10 . 10 . 3". Below that is a text field for "Port" containing the value "402". At the bottom of the dialog are four buttons: "< Back", "Next >", "Cancel", and "Help". The "Next >" button is highlighted with a dashed border.

8. At the Deployment Server Console Information screen, determine the graphical user interface (GUI) console location, and then click **Next** to continue.
 - If the console will be on the current Deployment Server, select **On this computer**.
 - If the console will be on a remote computer, select **On a remote computer**, and enter the name of the remote computer.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". Inside the dialog, the title "Deployment Server Console Information" is displayed above the instruction "Enter information about where the console should be installed." There is a small icon of a computer with a monitor in the top right corner. The main area of the dialog asks "Where would you like to install the Deployment Server Console?" and provides two radio button options: "On this computer" (which is selected) and "On a remote computer". Below the "On a remote computer" option is a text input field with the placeholder text "Enter the name of the remote computer" and a "Browse" button to its right. At the bottom of the dialog, there are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

9. If the Deployment Server Web Console will be used, verify that Internet Information Service is installed and running on the computer where the service is to be installed. Select either **On this computer** or **On a remote computer**, and click **Next** to continue.
- If the Deployment Server Web Console will not be used, select **Do not install**, and click **Next** to continue.



The image shows a Windows-style dialog box titled "Altiris eXpress Deployment Server Installation". The main heading is "Deployment Server Web Console Information". Below the heading, it says "Enter information about where the Deployment Web Console should be installed. It must be on a computer that is running IIS." There is a small icon of a computer with a monitor and a CD-ROM in the top right corner.

The main content area has a question: "Where would you like to install the Deployment Web Console?". Below this are three radio button options:

- ☒ **Do not install**
- ☐ **On this computer (IIS must be running)**
- ☐ **On a remote computer**

Below the "On a remote computer" option is a text field with the placeholder "Enter the name of a remote computer that is running IIS" and a "Browse" button to its right.

Below that is a "Console Port:" label followed by a text field containing "8081".

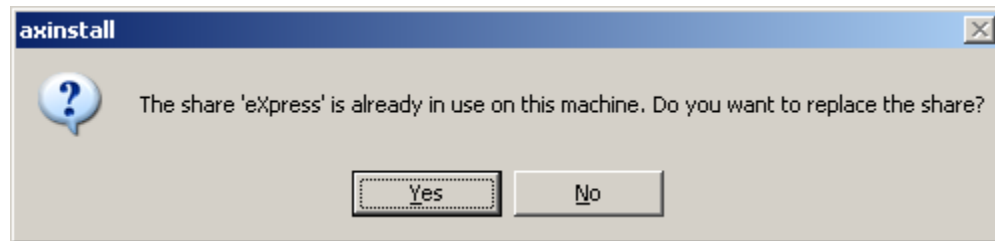
Below that is a text field with the placeholder "Enter the path on the computer to install the Deployment Web Console." and the text "C:\Program Files\Altiris\Express\Deployment Web Console" entered.

Below that is a note: "The following account must exist on the Deployment Server Client Access Point and the Deployment Web Console computer that is running IIS."

Below the note are two text fields: "Service username:" containing "Administrator" and "Service Password:" containing a masked password (represented by asterisks).

At the bottom of the dialog are four buttons: "< Back", "Next >" (which is highlighted with a dashed border), "Cancel", and "Help".

10. Click **Install** at the Installation Information screen. The Deployment Server software installation begins.
11. When prompted to replace the eXpress share, click **Yes**.



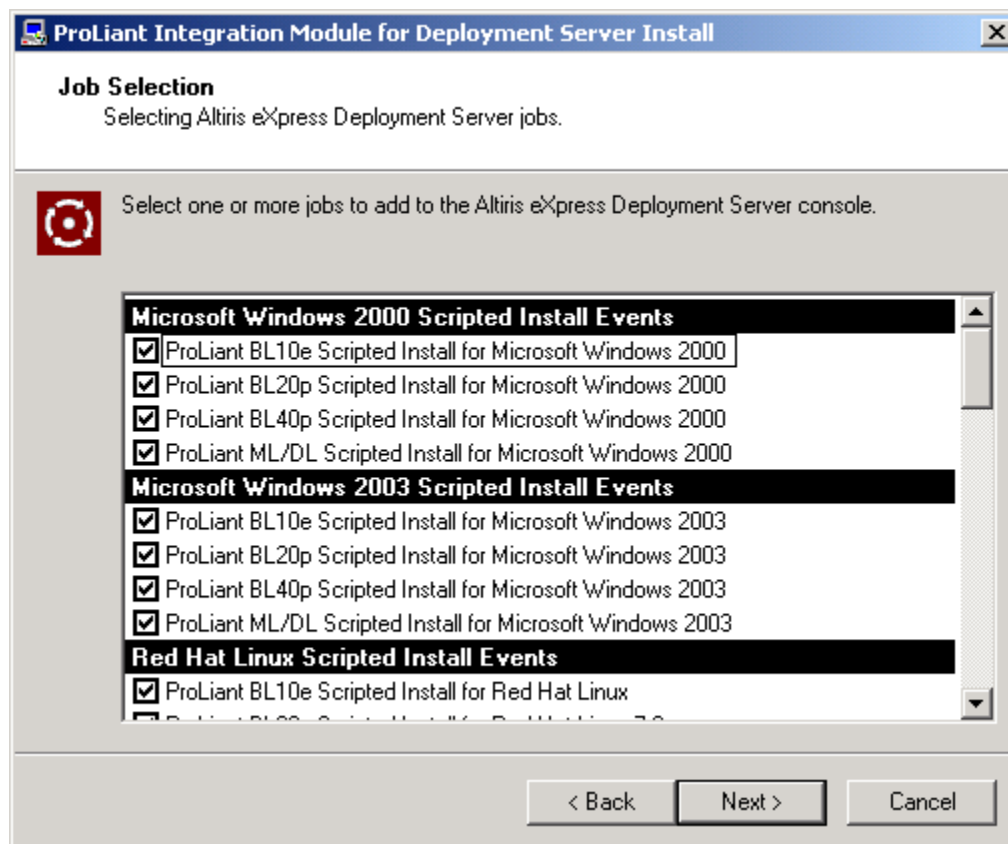
12. Click **Finish** at the Installation Information Summary screen.

ProLiant Integration Module for Deployment Server

IMPORTANT: If you have modified any of the provided batch files, be sure you have made backup copies of these altered batch files (located in `.\deploy\tools\scripts`), because the upgrade program overwrites these files with new files.

IMPORTANT: If you have modified any of the provided jobs, be sure you have renamed these jobs and made backup copies before overwriting the existing jobs.

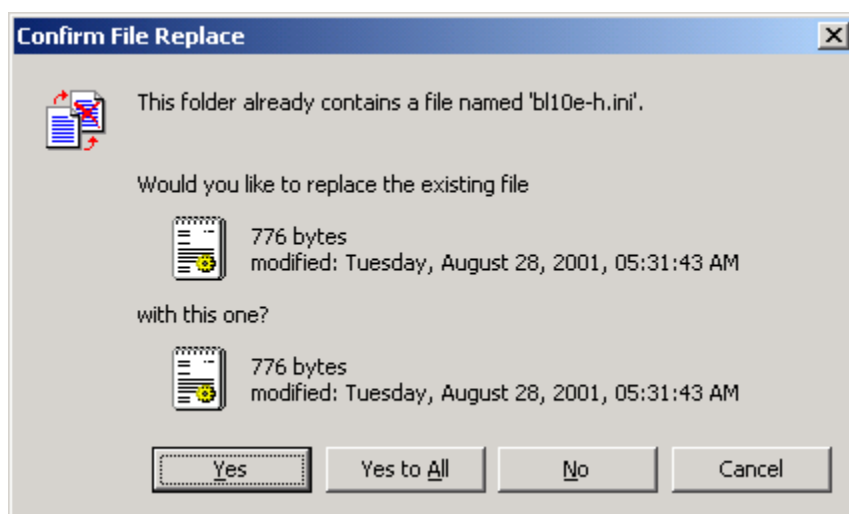
1. From the Software Upgrades page, click **HP ProLiant Integration Module for Deployment Server X.XX**, where X.XX is the software version.
2. Select the deployment jobs to import into the Deployment Server Console, and then click **Next**.



3. Click **Next** at the Installation screen to begin the software installation.

New versions of the Rapid Deployment Pack might contain updated versions of the ProLiant Support Pack files. The new files are added to `.deploy\cds\compaq\ss.xxx`, where `xxx` represents the new support file version. Any jobs added during installation reference the new support files. You are prompted to select whether you want to overwrite the existing provided jobs.

4. When prompted, select whether to skip or overwrite existing configuration files, located in `.deploy\configs`. All files other than the configuration files are overwritten automatically, including documentation, the SmartStart Scripting Toolkit, and batch files used by the jobs.



5. When prompted, select whether to omit or overwrite any existing jobs in the Deployment Server Console with updated jobs.

If you choose not to overwrite the existing provided jobs, you must manually edit the jobs to use the latest ProLiant Support Pack version. For complete instructions to edit the jobs to use updated support files, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide*.

IMPORTANT: If you have modified any of the provided jobs, be sure you have renamed these jobs and made backup copies before overwriting the existing jobs.

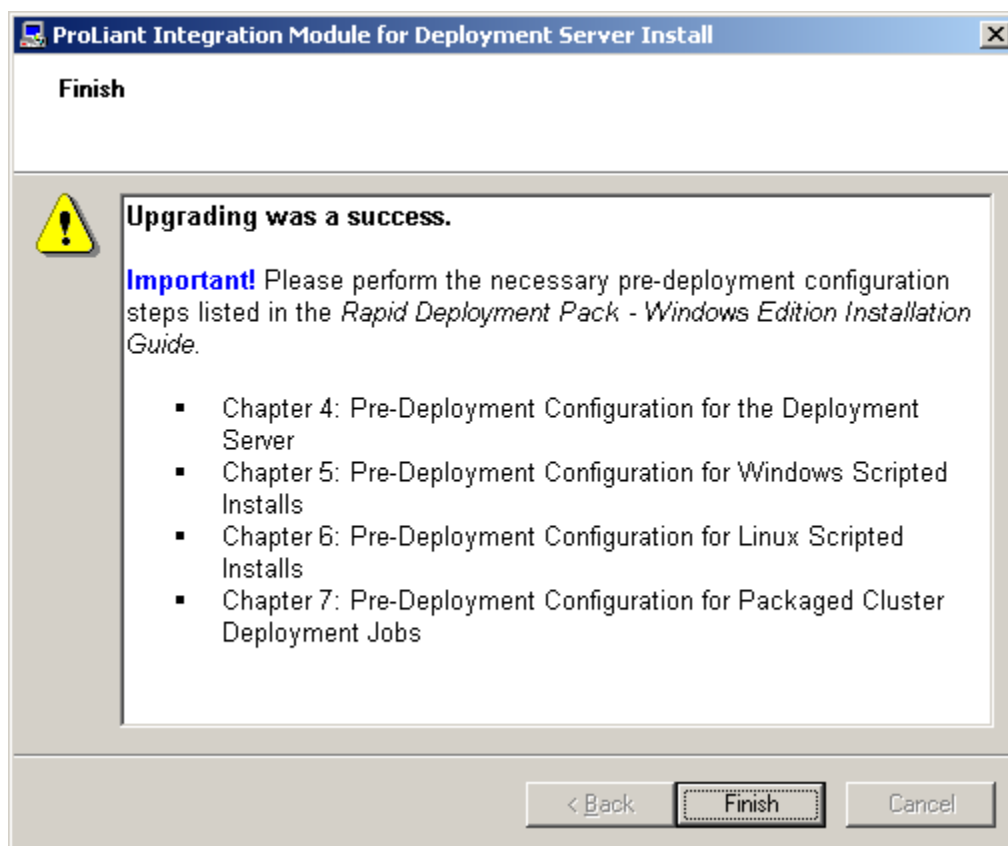


6. If necessary, you are prompted to insert operating system CDs to allow appropriate files required for scripted install jobs to be copied to the Deployment Server directory. Click **Next** to begin the copy process.

IMPORTANT: If you omit copying the Windows operating system CD and/or Red Hat Enterprise Linux boot files at this time by clicking **Cancel**, manually install these files at a later time. For instructions, refer to the appendices of this guide.

NOTE: You are prompted for a Red Hat Enterprise Linux CD #1 to copy only the Linux boot files to the Deployment Server. Red Hat Enterprise Linux distribution CDs are installed on the Linux NFS server. Use the same CD distribution during the installations of the Deployment Server and NFS server.

7. Click **Finish** when the software installation is complete.



The Deployment Server upgrade is complete. For necessary configuration modifications, refer to the appropriate pre-deployment procedures in this guide. Some modifications might not be necessary if the database contents were retained during the upgrade.

ProLiant Integration Module for NFS Server

1. Insert the Rapid Deployment Pack—Windows Edition CD into the NFS server.
2. Log in as `root` at the NFS server.
3. Mount the CD using the command:

```
mount /mnt/cdrom (Red Hat Linux)
```

or

```
mount /media/cdrom (UnitedLinux)
```

4. Run the setup script:

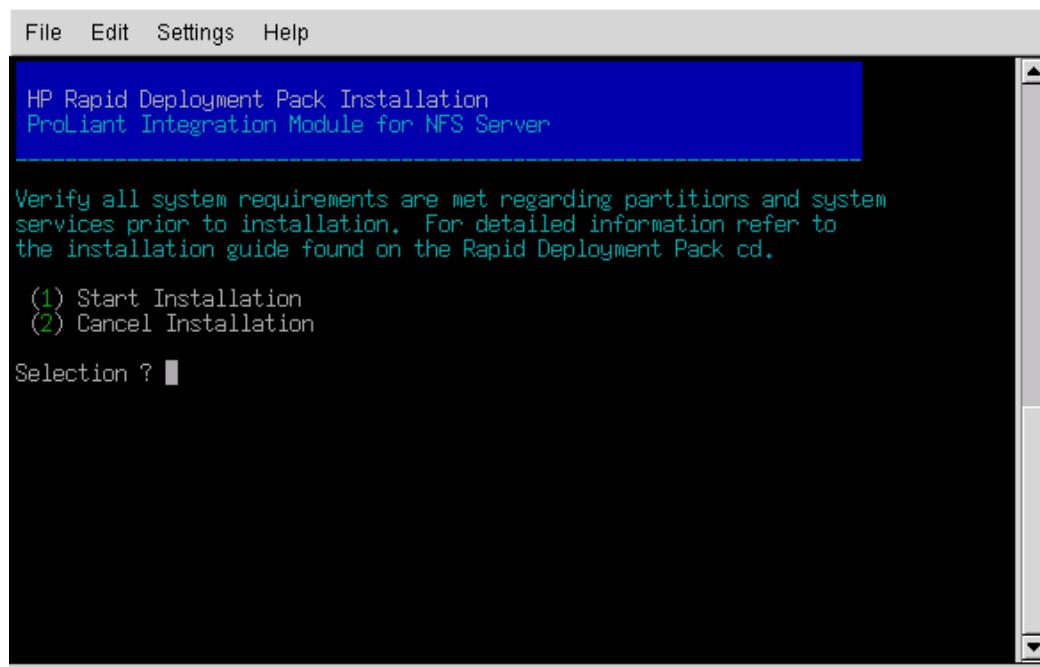
```
/mnt/cdrom/pim-nfs/setup-pimnfs.sh (Red Hat)
```

or

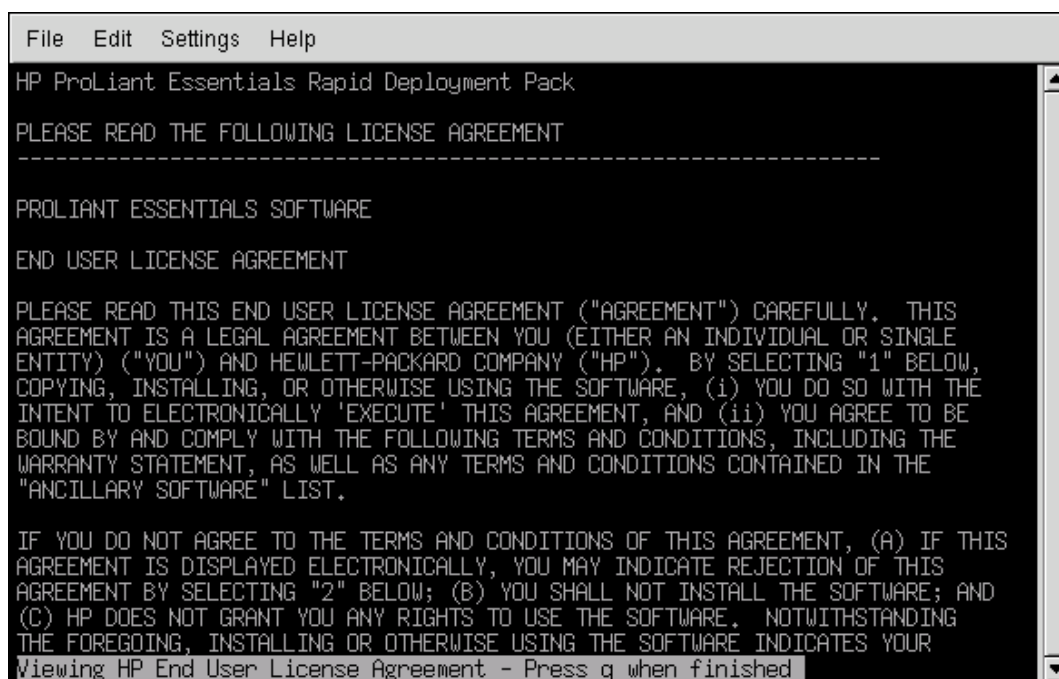
```
/media/cdrom/pim-nfs/setup-pimnfs.sh (UnitedLinux)
```

NOTE: Do not change the directory to the CD-ROM directory to run the setup script.

5. Enter 1 to start the installation, and press the **Enter** key.



6. Read the license agreement, and then enter `q`.



A screenshot of a terminal window titled "HP ProLiant Essentials Rapid Deployment Pack". The window has a menu bar with "File", "Edit", "Settings", and "Help". The text displayed is as follows:

```
HP ProLiant Essentials Rapid Deployment Pack

PLEASE READ THE FOLLOWING LICENSE AGREEMENT
-----

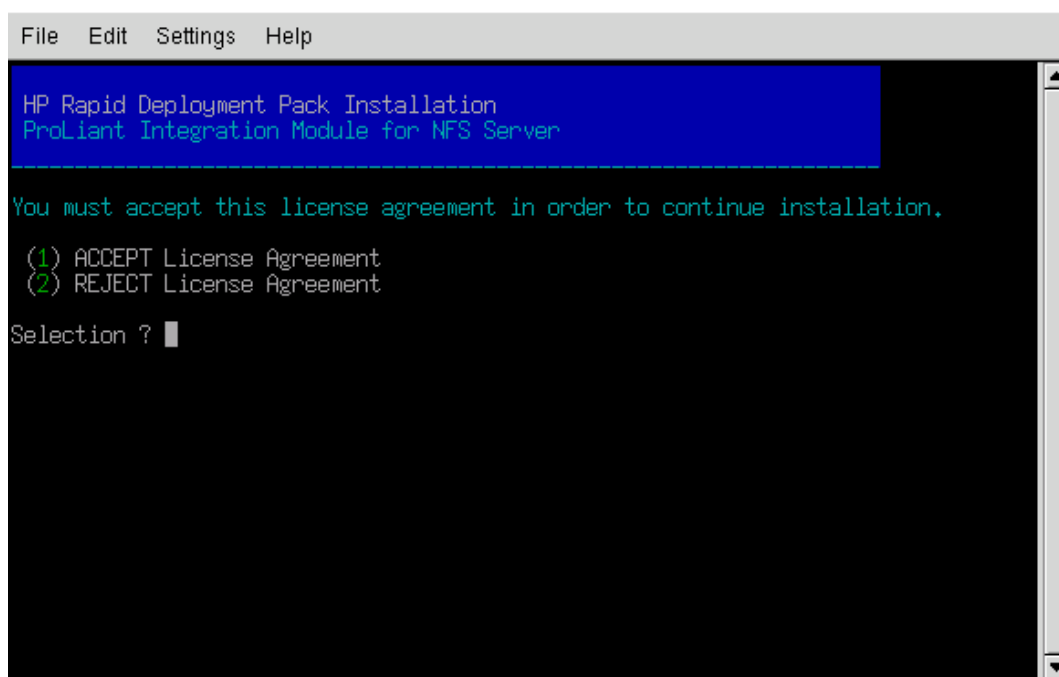
PROLIANT ESSENTIALS SOFTWARE

END USER LICENSE AGREEMENT

PLEASE READ THIS END USER LICENSE AGREEMENT ("AGREEMENT") CAREFULLY. THIS
AGREEMENT IS A LEGAL AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR SINGLE
ENTITY) ("YOU") AND HEWLETT-PACKARD COMPANY ("HP"). BY SELECTING "1" BELOW,
COPYING, INSTALLING, OR OTHERWISE USING THE SOFTWARE, (i) YOU DO SO WITH THE
INTENT TO ELECTRONICALLY 'EXECUTE' THIS AGREEMENT, AND (ii) YOU AGREE TO BE
BOUND BY AND COMPLY WITH THE FOLLOWING TERMS AND CONDITIONS, INCLUDING THE
WARRANTY STATEMENT, AS WELL AS ANY TERMS AND CONDITIONS CONTAINED IN THE
"ANCILLARY SOFTWARE" LIST.

IF YOU DO NOT AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT, (A) IF THIS
AGREEMENT IS DISPLAYED ELECTRONICALLY, YOU MAY INDICATE REJECTION OF THIS
AGREEMENT BY SELECTING "2" BELOW; (B) YOU SHALL NOT INSTALL THE SOFTWARE; AND
(C) HP DOES NOT GRANT YOU ANY RIGHTS TO USE THE SOFTWARE. NOTWITHSTANDING
THE FOREGOING, INSTALLING OR OTHERWISE USING THE SOFTWARE INDICATES YOUR
Viewing HP End User License Agreement - Press q when finished
```

7. If you agree to the terms of the license agreement, enter `1` to accept the license agreement, and then press the **Enter** key.



A screenshot of a terminal window titled "HP Rapid Deployment Pack Installation". The window has a menu bar with "File", "Edit", "Settings", and "Help". The text displayed is as follows:

```
HP Rapid Deployment Pack Installation
ProLiant Integration Module for NFS Server

You must accept this license agreement in order to continue installation.

(1) ACCEPT License Agreement
(2) REJECT License Agreement

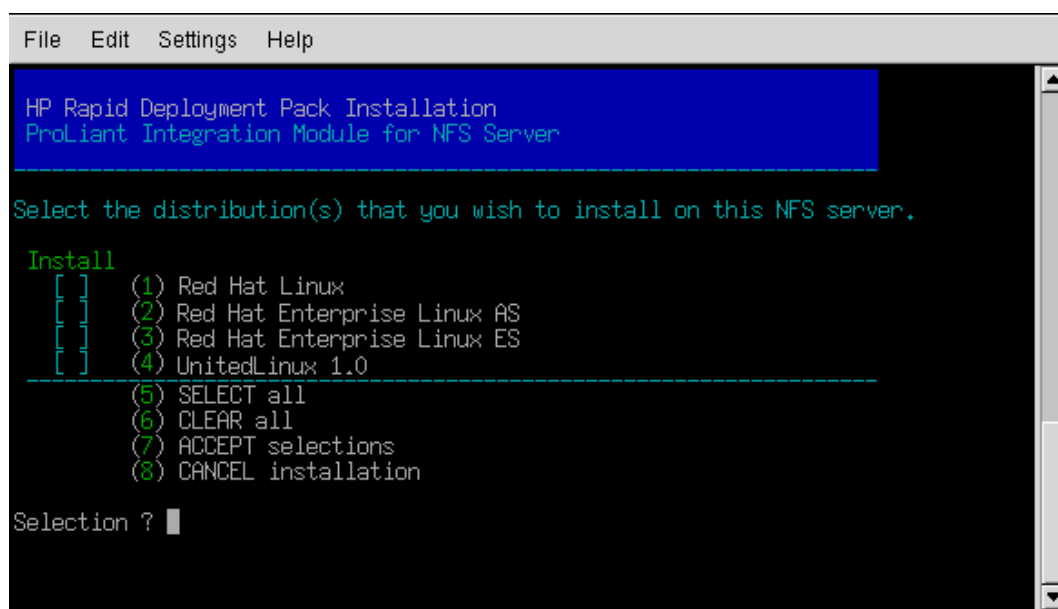
Selection ? █
```

8. A list of the supported Linux distributions that can be deployed with Rapid Deployment Pack appears. Selecting a Linux Distribution copies the ProLiant Support Pack files for that distribution and starts the Linux distribution CD query process to copy the Linux files onto the NFS server.

To select a distribution to install, enter the corresponding selection number for the distribution, and then press the **Enter** key. To select all the distributions, enter the appropriate number to **SELECT all**, and then press the **Enter** key.

IMPORTANT: If UnitedLinux was installed previously, select UnitedLinux at this time to install and use the latest service pack. For service pack version information, refer to the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition Support Matrix*.

NOTE: Selection numbers will vary depending on the number of available distributions.

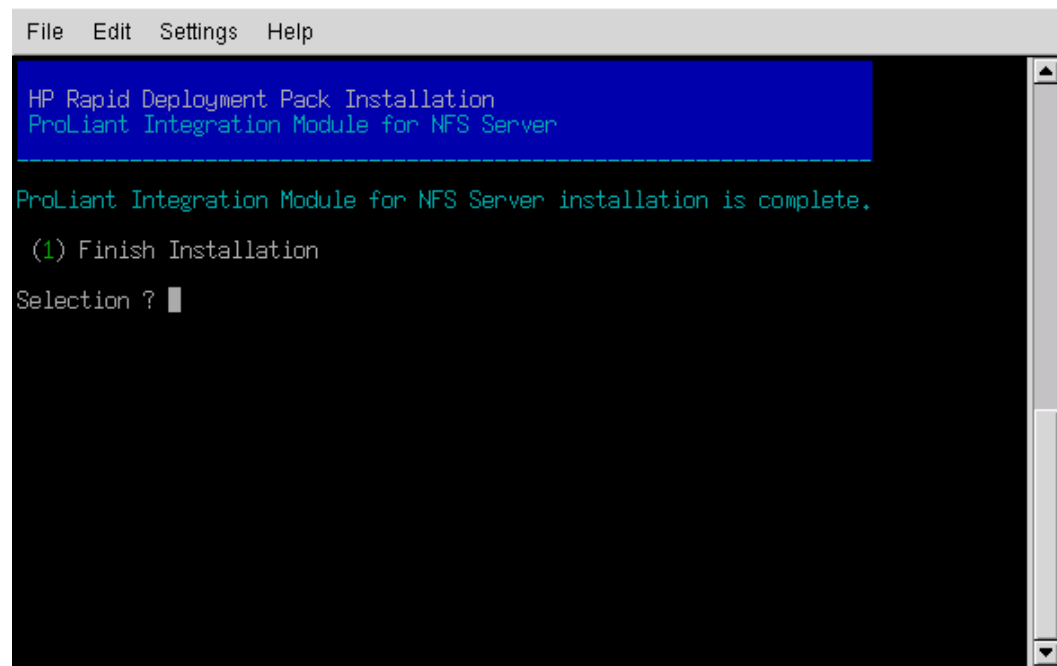


9. After selecting all the Linux distribution to be installed, enter the appropriate number to **ACCEPT selections**, and then press the **Enter** key. The file copy and CD query process begins. If the Linux distribution CDs have already been copied to the NFS server, you are prompted to select whether you want to copy the files again.

IMPORTANT: The version and Update of the Red Hat Enterprise Linux CDs used during the installation of the NFS server and the Deployment Server must match.

10. After the ProLiant Support Pack files and distributions files are copied, you are prompted for the Rapid Deployment Pack—Windows Edition CD. Insert the CD into the CD-ROM drive.

11. The following screen appears confirming that the ProLiant Integration Module for NFS Server installation is complete. Enter 1 to finish the installation, and then press the **Enter** key.



Before attempting to use the Deployment Server to perform Linux distribution scripted installations, complete the appropriate pre-deployment procedures in this guide. Some modifications might not be necessary if the database contents were retained during the upgrade.

Pre-Deployment Configuration for the Deployment Server

These required and optional configuration modifications are only necessary after a first-time installation of the Rapid Deployment Pack.

After an upgrade installation, HP recommends recreating physical boot diskettes. Refer to the “Creating Physical Boot Diskettes for Server Deployment” section.

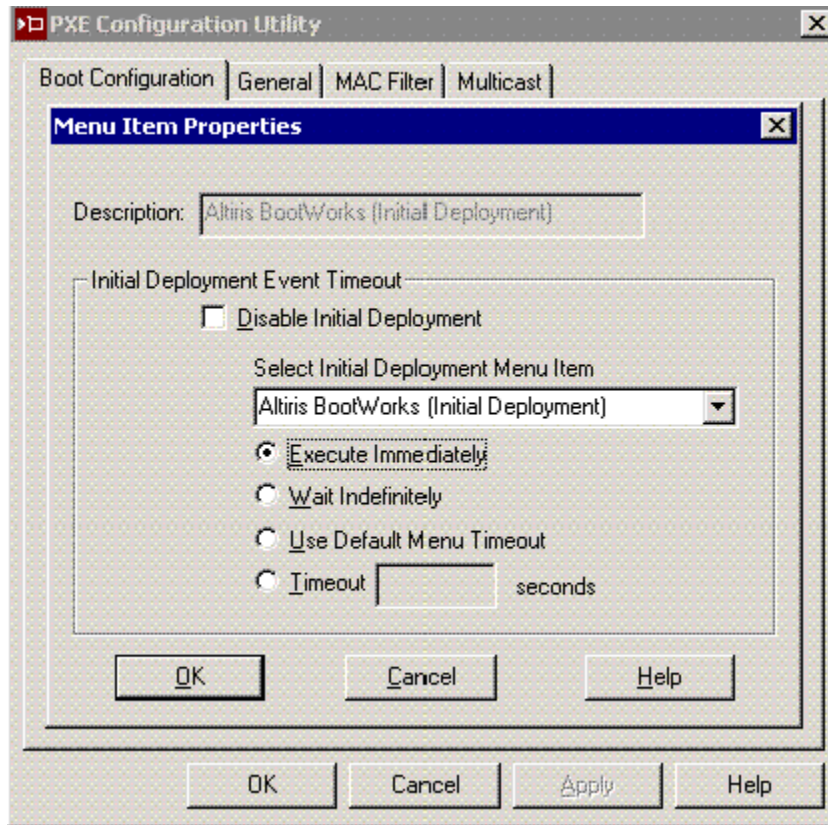
Configuring PXE to Automatically Process New Computers

By default, when a new computer (a computer not listed in the Deployment Server database) performs a PXE boot, the PXE server sends the computer the PXE menu and waits for manual selection of the Initial Deployment option. This behavior is designed for desktops and is not practical for servers, especially server blades with no local keyboard, mouse, or display.

To configure PXE to automatically select the Initial Deployment menu item and continue without user interaction:

1. From the Deployment Server Console menu, select **Tools>PXE Configuration**.
2. Select the PXE server from the dropdown list, and then click **OK**.

- Click **Altiris Bootworks (Initial Deployment)>Edit** to display the Menu Item Properties screen.



- Select **Execute Immediately**.
- Click **OK** to close both windows.



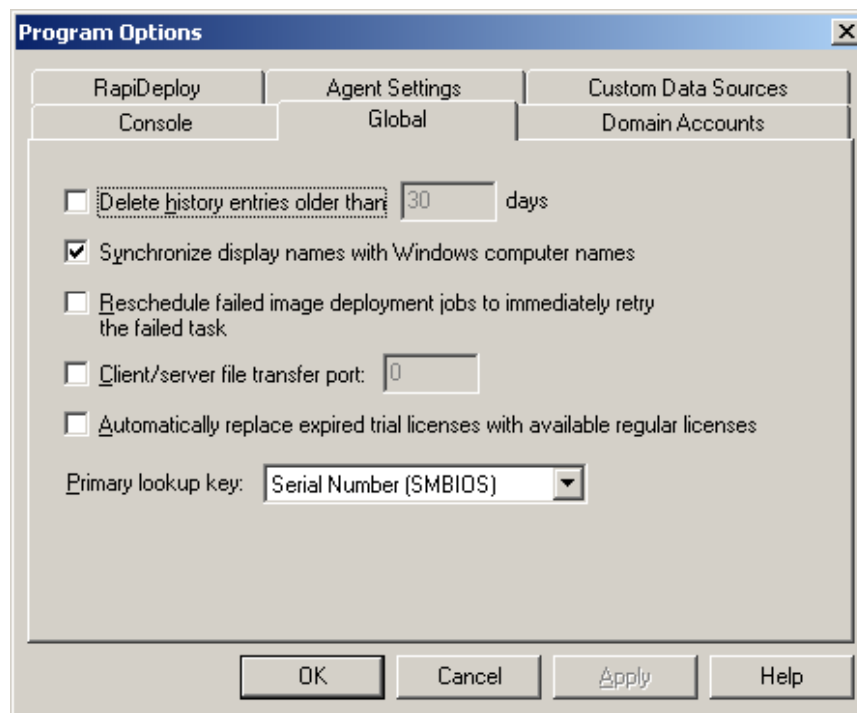
CAUTION: Do **not** reorder the boot menu located on the Menu Items list on the Boot Configuration tab. The Altiris Deployment Solution selects the top menu item as the default action when there is no task for a computer to perform. Moving another selection, such as Initial Deploy, to the top of the list causes the server to never boot locally, and to cycle in an endless loop of reboots.

Synchronizing the Deployment Server Console Name with the Windows Name

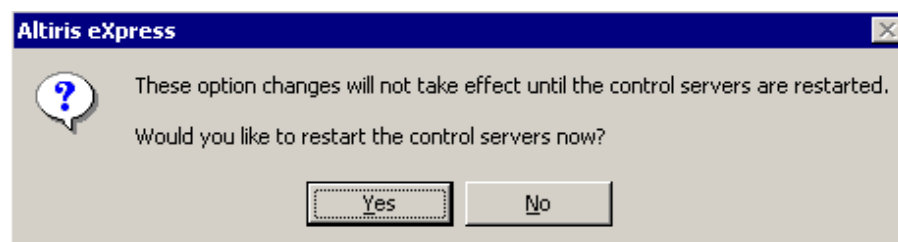
The Deployment Server can use a console display name that is different from the actual computer name. However, you can select to have the console always reflect the same name as the computer name.

To synchronize the Deployment Server Console and operating system names:

1. At the Deployment Server Console, select **Tools>Options**.
2. At the Program Options window, select the **Global** tab.



3. Select the **Synchronize display names with Windows computer names** checkbox.
4. Click **OK**.
5. Click **Yes** when prompted to restart the control servers.



NOTE: This capability is currently only available for Windows servers running the Altiris Deployment Agent for Windows.

Modifying the Primary Lookup Key

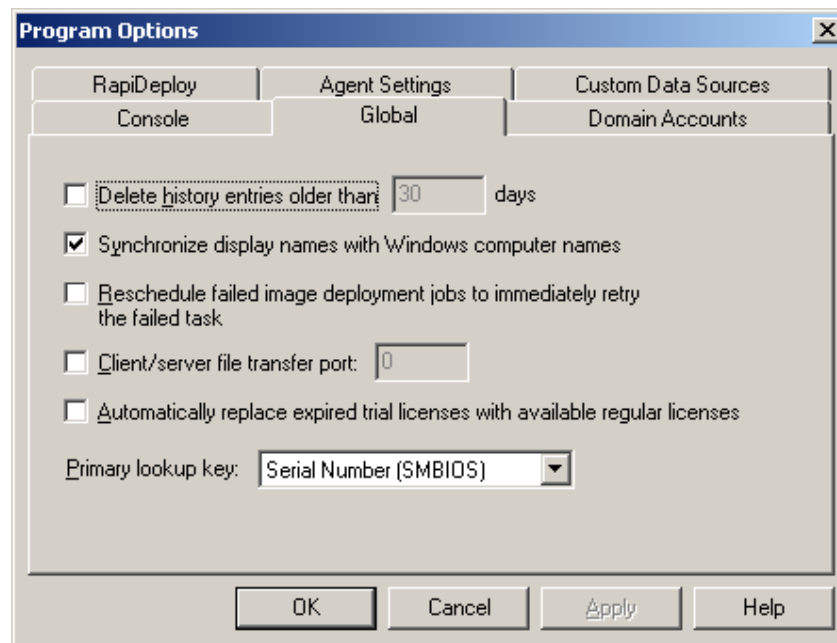
The Deployment Server uses the primary lookup key to determine if a server is already in the database.

HP recommends setting the primary lookup key as the server serial number. Setting the primary lookup key as the server serial number has two benefits:

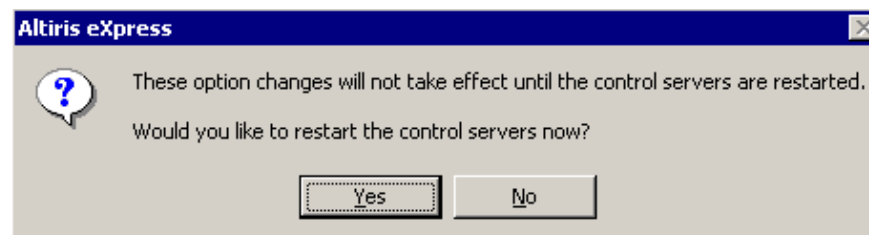
- It enables servers to be imported by their serial number, rather than keys that are more difficult to determine, such as the MAC address.
- It prevents duplicate database entries from occurring when servers have two or more NICs.

To change the primary lookup key to the server serial number:

1. At the Deployment Server Console, select **Tools>Options**.
2. At the Program Options window, select the **Global** tab.



3. From the Primary lookup key dropdown list, scroll up and select **Serial Number (SMBIOS)**.
4. Click **OK**, and click **Yes** when prompted to restart the control servers.



Configuring ProLiant BL Server Enclosures

The Physical Devices view in the Deployment Server Console displays the physical relationship among the racks, enclosures, and server blades using the rack name and enclosure name for each ProLiant BL server. The default name for the server rack is “UnnamedRack,” and the default name for the BL e-Class server enclosure is the MAC address of the NIC associated with the Integrated Administrator.

Setting the rack name and enclosure name is recommended before the first server in an enclosure connects to the Deployment Server. After ProLiant BL servers are powered up for the first time and the rack and enclosure names are recorded in the Deployment Server database, the servers must be rebooted for new rack and enclosure names to be discovered. In addition, the default-named rack and enclosure must be manually deleted from the console.

ProLiant BL e-Class Servers

To change the rack and enclosure names if the Integrated Administrator port is connected to a network with DHCP:

1. Browse to the DNS name located on the tag attached to the interconnect tray on the enclosure.
2. Log in to the Integrated Administrator using the user name and password located on the tag.
3. At the Enclosure Information screen, change the **Enclosure Name** and **Rack Name**, and then click **Apply**.

IMPORTANT: Do not use the same enclosure name for multiple enclosures. Using the same enclosure name results in multiple server blades displayed in each bay for an enclosure and duplicate default server names.

The screenshot displays the HP ProLiant BL e-Class Integrated Administrator web interface. The top navigation bar includes links for Enclosure, Bays, Administration, Event List, and Interconnect. The main content area is titled "Enclosure Information" and contains a form for configuring the enclosure. The form includes fields for Enclosure Name (00508BEBF05A), Rack Name (UnnamedRack), and Enclosure Status (Degraded). It also displays various system metrics such as Fan Status (Redundant Fans), Fan #1-4 (OK, Standby), Fan Spare Number (253079-001), Chassis Temperature (OK, 91°F / 33°C), Fan Exhaust Temperature (OK, 84°F / 29°C), Blade Bay Temperature (OK, N/A), Power Subsystem Status (Non-Redundant Power), Total Capacity (1200 Watts), and Power Supply #1 Status (OK). The form has an "Apply" button at the bottom right.

If the Integrated Administrator port is not connected to a network with DHCP, refer to the documentation shipped with the product for details concerning how to access the Integrated Administrator using other methods, such as the serial console.

After configuring the enclosure, install the ProLiant BL e-Class servers into the enclosure by following the instructions provided with the server hardware.

For more information regarding ProLiant BL e-Class servers, refer to the documentation shipped with the product.

ProLiant BL p-Class Servers

To configure all racks and the ProLiant p-Class enclosure properly, at least one server blade must be placed in each enclosure. The server blade should not be powered on until the desired rack and enclosure names are set using the Integrated Lights-Out (iLO) interface. Otherwise, the server blade will boot to PXE (if enabled), and the default rack and enclosure name will be placed in the Deployment Server database.

To change the rack and enclosure names if the iLO port is connected to the network with DHCP services available:

1. Browse to the DNS name located on the tag attached to the ProLiant BL p-Class server.
2. Log on to iLO using the credentials on the tag.

NOTE: Users that do not have the Administrator ProLiant BL p-Class privilege can only view the settings.

3. Select the **BL p-Class** tab.
4. At the Rack Settings screen, change the **Rack Name** and **Enclosure Name**.

HP iLO INTEGRATED LIGHTS-OUT
Server Name: Administration
iLO Name: ILO03191TN0092
Logged in: Administrator

System Status Remote Console Virtual Devices Administration **BL p-Class** Insight Agent | Log out

Rack Settings ?

Rack Information

Rack Name: North America Rack Serial Number: 2090DW494E1
Enclosure Name: Accounting Enclosure Serial Number: D71962W410E88
Bay Name: Accounts Payable Blade Serial Number: 69D01FE10062
Bay: 0

Power On Control

Power Source: ☒ Rack Provides Power ☐ Facility Provides 48V
Enable Automatic Power On: ☒ Yes ☐ No
Enable Rack Alert Logging (IML): ☒ Yes ☐ No
Apply

IMPORTANT: Do not use the same enclosure name for multiple enclosures. Using the same enclosure name results in multiple server blades displayed in each bay for an enclosure and duplicate default server names.

5. Click **Apply**.
6. After the parameter changes have been made, click **Apply** to complete the changes.
7. Log out, and log back on to iLO.

For more information regarding iLO, refer to the documentation shipped with the product.

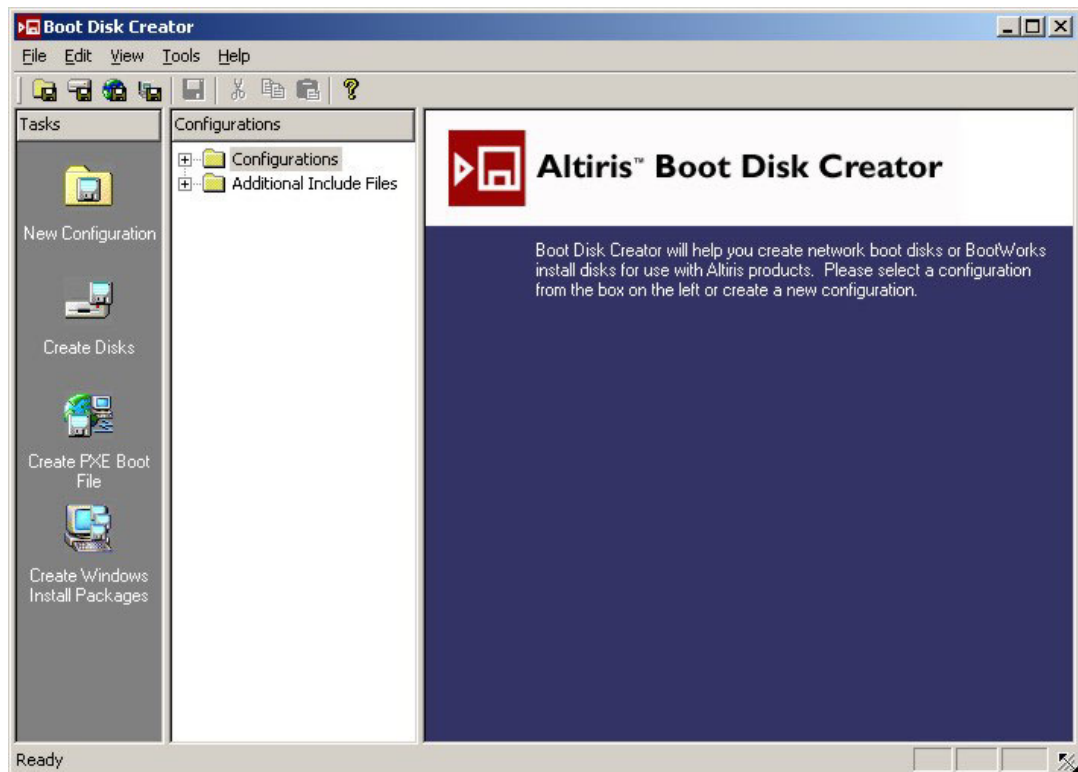
If the iLO port is not connected to a network with DHCP services available, refer to the documentation provided with your server blade for details about accessing iLO from the front panel of the server blade.

Creating Physical Boot Diskettes for Server Deployment

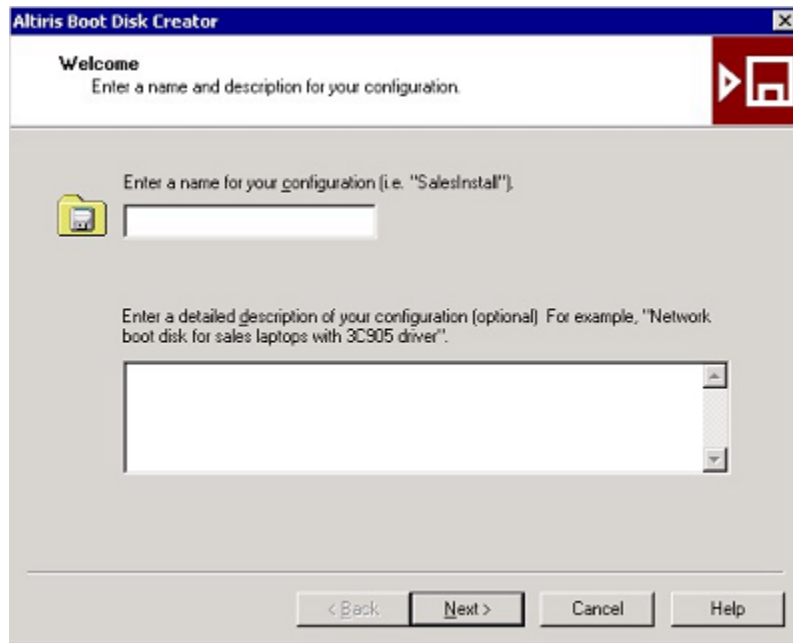
If PXE will not be used in the deployment infrastructure, one or more physical boot diskettes must be created to enable the target servers to communicate with the Deployment Server.

To create an MS-DOS boot diskette using the Boot Disk Creator within Altiris:

1. At the Deployment Server Console, select **Tools>Boot Disk Creator**.
The Boot Disk Creator application appears.

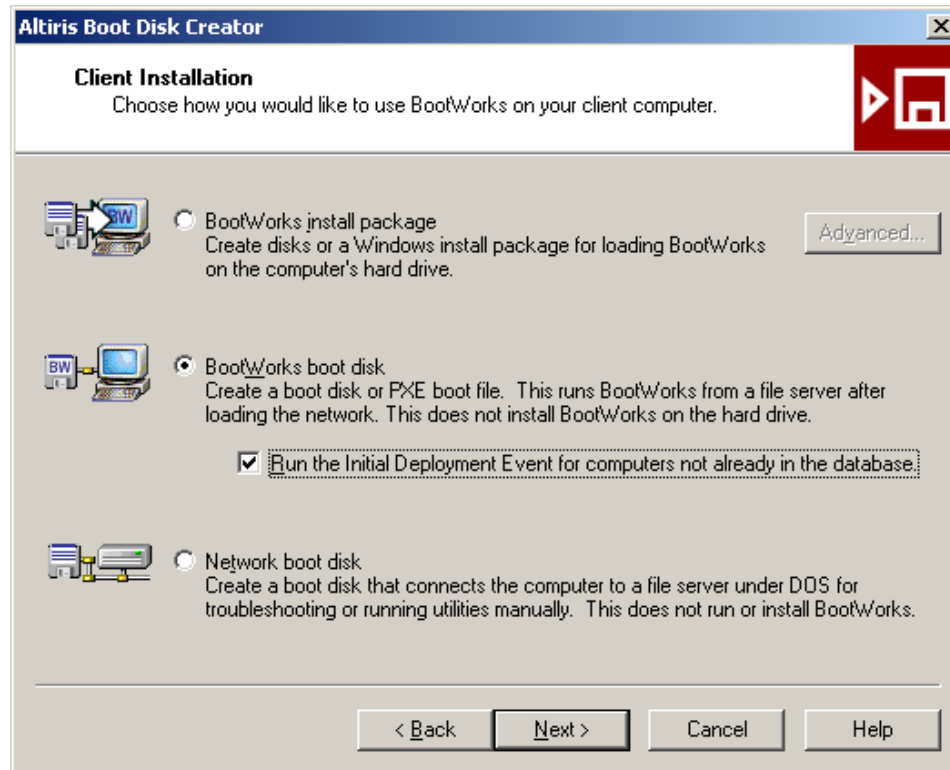


2. Click the **New Configuration** icon in the Tasks pane on the left. Enter a name for the configuration, such as DOS Boot Disk, and a description in the window that appears, and then click **Next**.

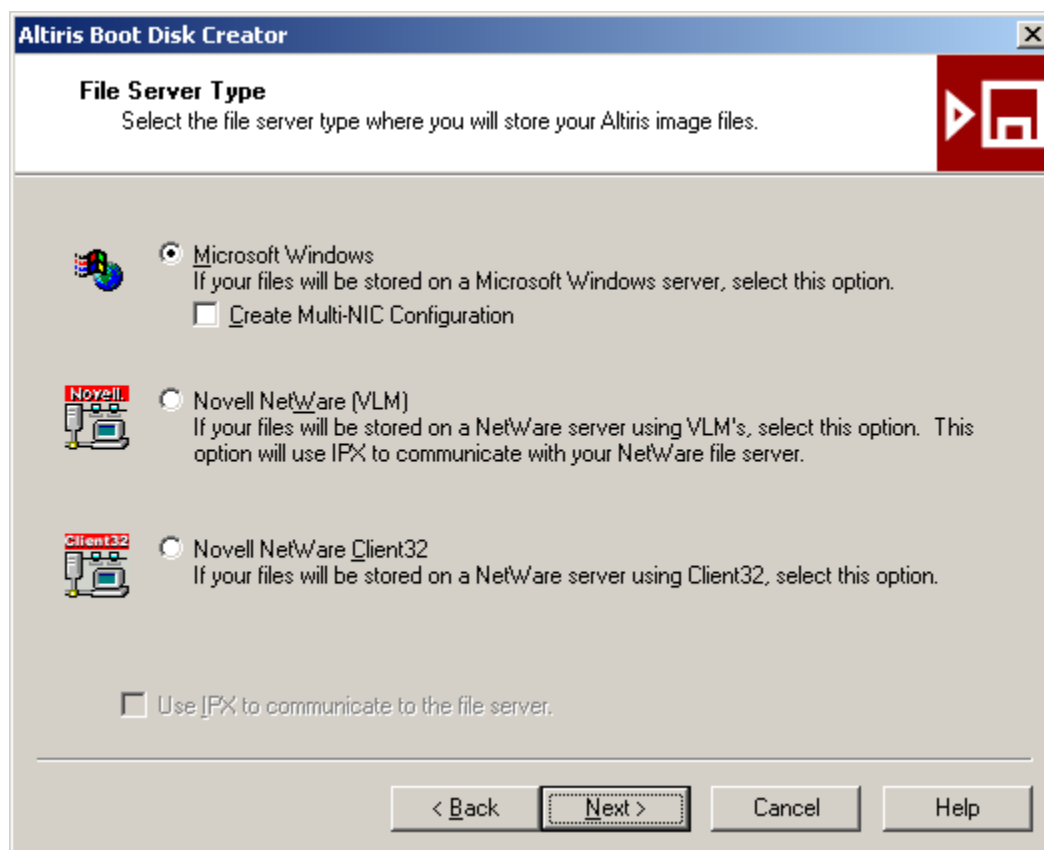


3. Select **BootWorks boot disk** from the available choices, select the **Run the Initial Deployment for computers not already in the database** checkbox, and then click **Next**.

NOTE: The Initial Deployment selection can be used on boot diskettes even when the computer is a managed computer, and Initial Deployment only runs the first time a computer appears in the Deployment Server Console.



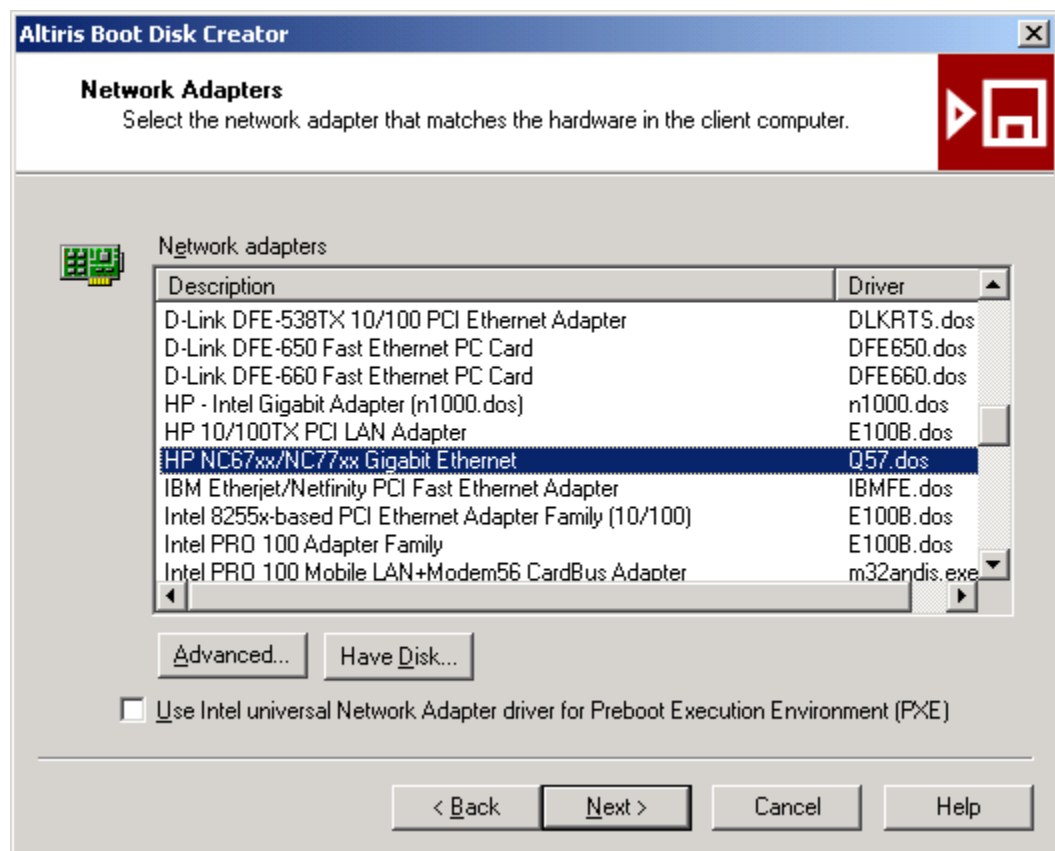
4. Click **Next** to accept the default selection of Microsoft Windows.



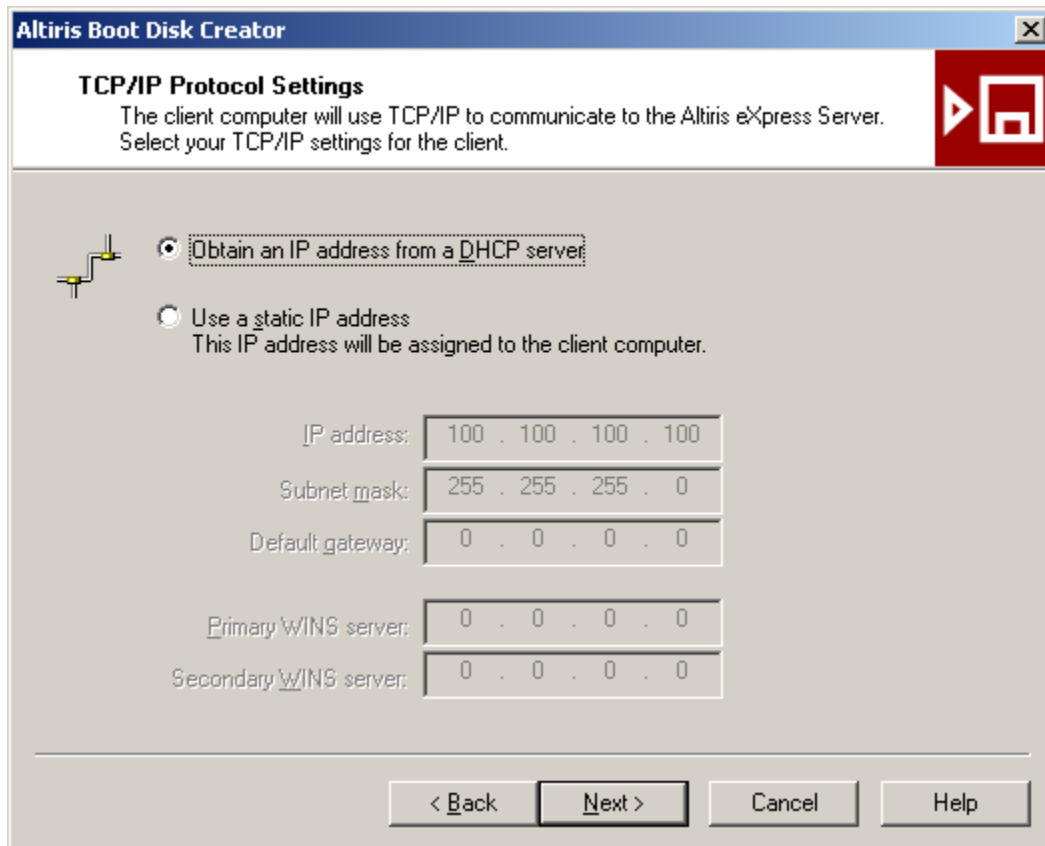
5. Select the appropriate driver for the target server NIC:

- For Intel-based Gigabit NICs, select **HP -Intel Gigabit Adapter (n1000 .dos)**.
- For Intel 10/100 NICs, select **HP 10/100TX PCI LAN Adapter**.
- For ProLiant DL100-series Broadcom-based servers, select **Broadcom NetXtreme Gigabit Ethernet**.
- For other ProLiant servers with Broadcom-based NICs, select **HP NC67xx/NC77xx Gigabit Ethernet**.

NOTE: Be sure the Use Intel universal Network Adapter driver for Preboot eXecution Environment (PXE) checkbox is not selected.

6. Click **Next**.

7. If static IP addresses are required, enter the appropriate information, and then click **Next** to accept the IP settings.



The image shows a screenshot of the 'Altiris Boot Disk Creator' application window. The title bar reads 'Altiris Boot Disk Creator'. The main window has a header section titled 'TCP/IP Protocol Settings' with a sub-header: 'The client computer will use TCP/IP to communicate to the Altiris eXpress Server. Select your TCP/IP settings for the client.' Below this, there are two radio button options. The first option, 'Obtain an IP address from a DHCP server', is selected. The second option, 'Use a static IP address', is unselected, and it has a sub-label: 'This IP address will be assigned to the client computer.' Below the radio buttons, there are five text input fields for static IP configuration: 'IP address:' (100 . 100 . 100 . 100), 'Subnet mask:' (255 . 255 . 255 . 0), 'Default gateway:' (0 . 0 . 0 . 0), 'Primary WINS server:' (0 . 0 . 0 . 0), and 'Secondary WINS server:' (0 . 0 . 0 . 0). At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

Altiris Boot Disk Creator

TCP/IP Protocol Settings
The client computer will use TCP/IP to communicate to the Altiris eXpress Server.
Select your TCP/IP settings for the client.

☒ Obtain an IP address from a DHCP server

☐ Use a static IP address
This IP address will be assigned to the client computer.

IP address: 100 . 100 . 100 . 100

Subnet mask: 255 . 255 . 255 . 0

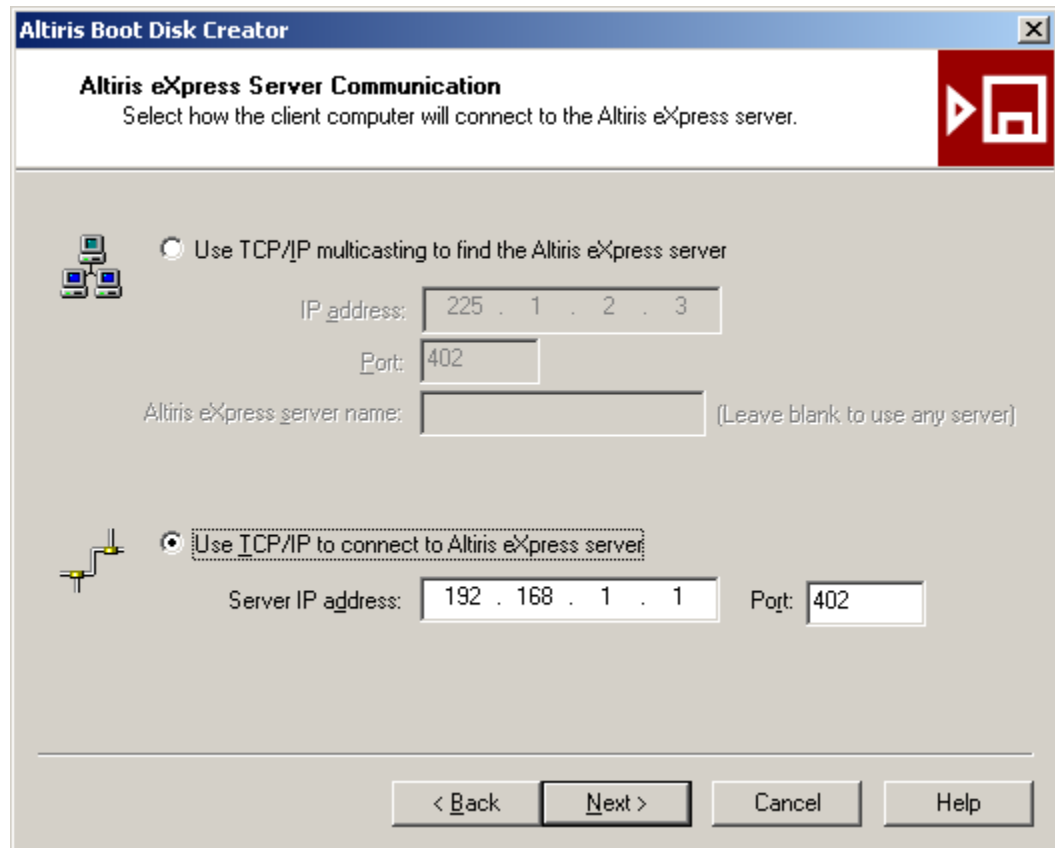
Default gateway: 0 . 0 . 0 . 0

Primary WINS server: 0 . 0 . 0 . 0

Secondary WINS server: 0 . 0 . 0 . 0

< Back Next > Cancel Help

8. In the Use TCP/IP to connect to Altiris eXpress server field, verify the Server IP address setting reflects the IP address of your Deployment Server, and then click **Next**.



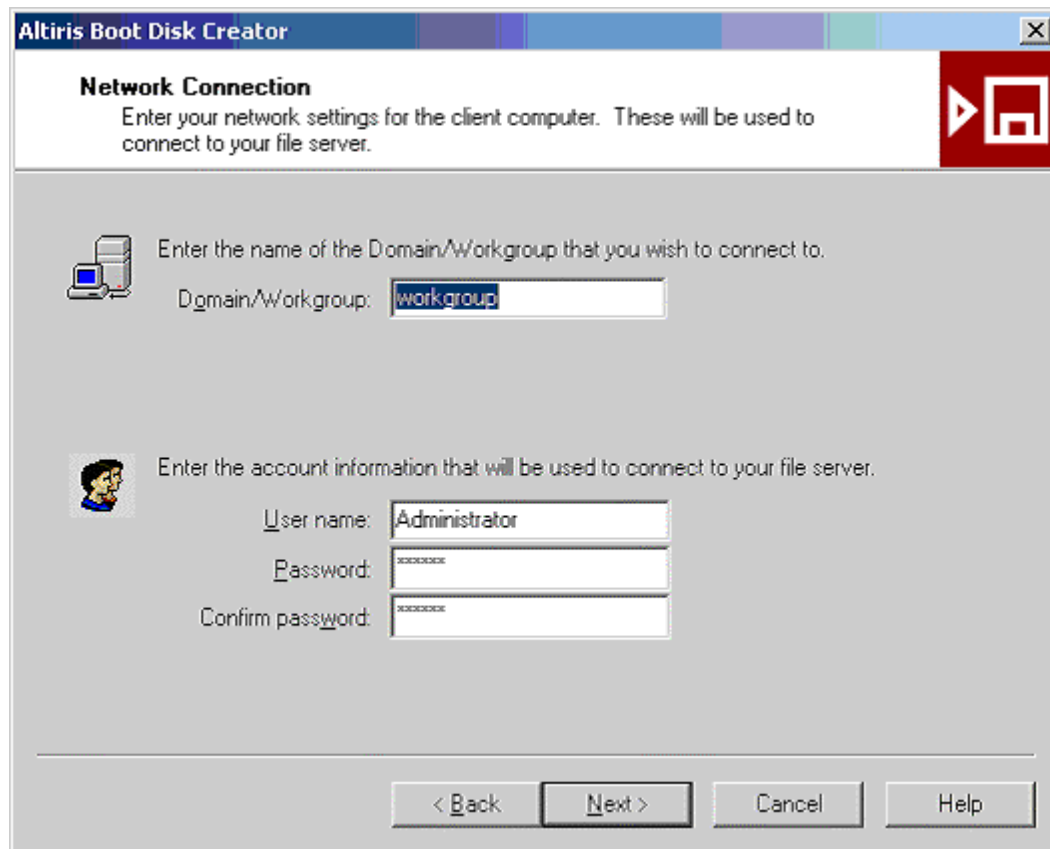
The image shows a screenshot of the "Altiris Boot Disk Creator" window, specifically the "Altiris eXpress Server Communication" tab. The window has a title bar with the text "Altiris Boot Disk Creator" and a close button. Below the title bar, the tab is labeled "Altiris eXpress Server Communication" with a subtitle "Select how the client computer will connect to the Altiris eXpress server." and a red square icon with a white play button symbol.

There are two radio button options for server communication:

- ☐ Use TCP/IP multicasting to find the Altiris eXpress server. This option is accompanied by an icon of three computer monitors. Below it are input fields for "IP address:" (containing "225 . 1 . 2 . 3"), "Port:" (containing "402"), and "Altiris eXpress server name:" (empty, with a note "(Leave blank to use any server)").
- ☒ Use TCP/IP to connect to Altiris eXpress server. This option is accompanied by an icon of a network cable. Below it are input fields for "Server IP address:" (containing "192 . 168 . 1 . 1") and "Port:" (containing "402").

At the bottom of the window, there are four buttons: "< Back", "Next >", "Cancel", and "Help". The "Next >" button is highlighted with a black border.

9. Click **Next** to accept the default workgroup name and login account settings.



The image shows a screenshot of the 'Altiris Boot Disk Creator' application window. The title bar reads 'Altiris Boot Disk Creator'. The main window has a header section titled 'Network Connection' with a subtitle: 'Enter your network settings for the client computer. These will be used to connect to your file server.' To the right of the header is a red square button with a white play icon and a square icon. Below the header, there are two sections. The first section is titled 'Enter the name of the Domain/Workgroup that you wish to connect to.' and features a computer icon. Below this text is a label 'Domain/Workgroup:' followed by a text input field containing the text 'workgroup'. The second section is titled 'Enter the account information that will be used to connect to your file server.' and features a person icon. Below this text are three labels: 'User name:', 'Password:', and 'Confirm password:'. Each label is followed by a text input field. The 'User name' field contains the text 'Administrator'. The 'Password' and 'Confirm password' fields contain six asterisks. At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

Altiris Boot Disk Creator

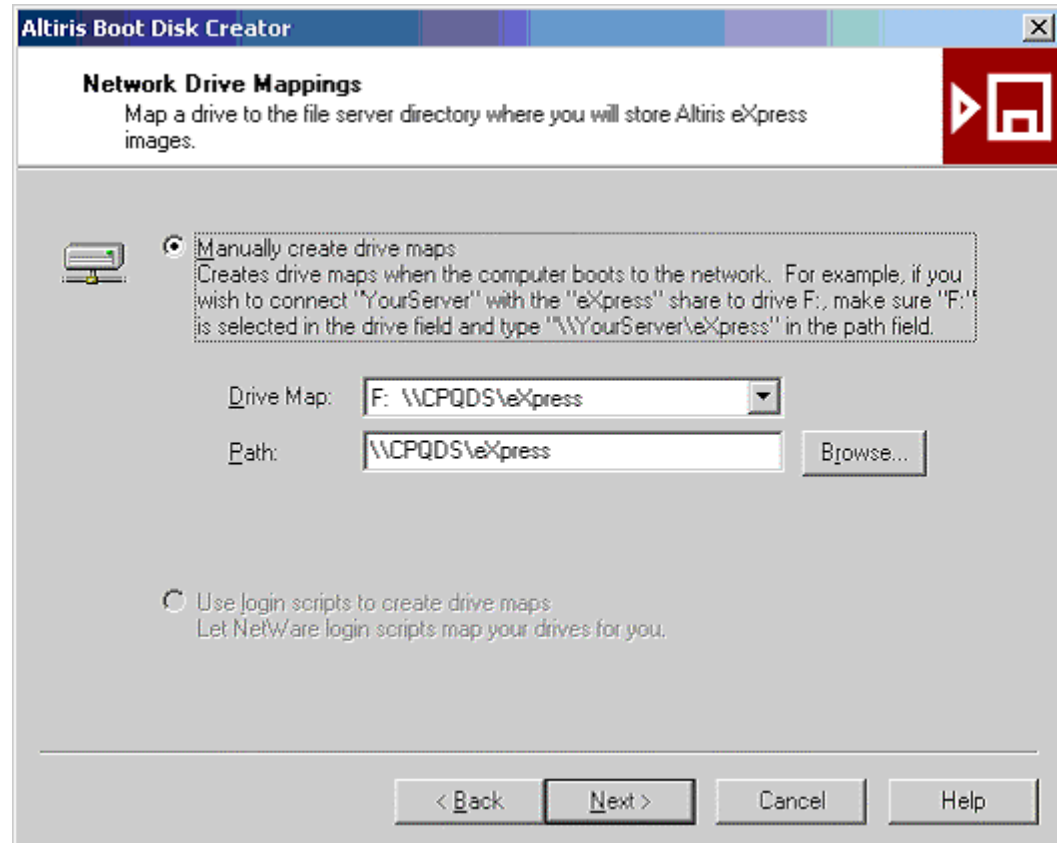
Network Connection
Enter your network settings for the client computer. These will be used to connect to your file server.

Enter the name of the Domain/Workgroup that you wish to connect to.
Domain/Workgroup:

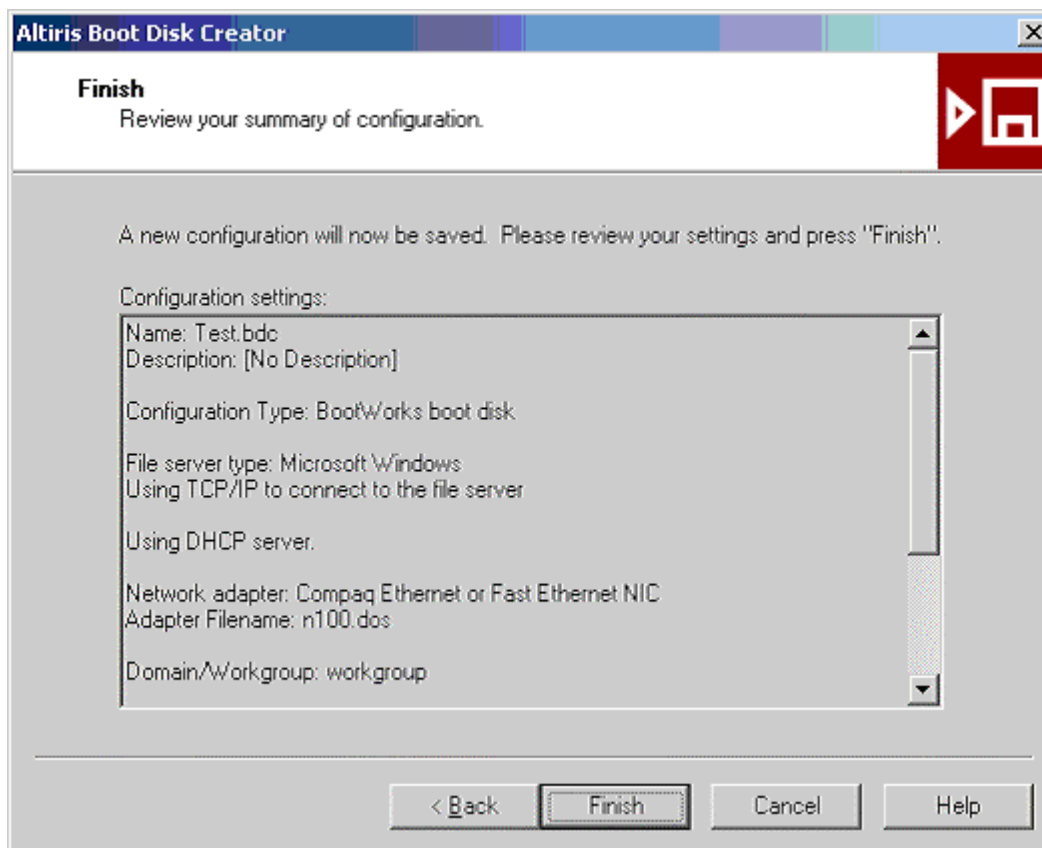
Enter the account information that will be used to connect to your file server.
User name:
Password:
Confirm password:

< Back Next > Cancel Help

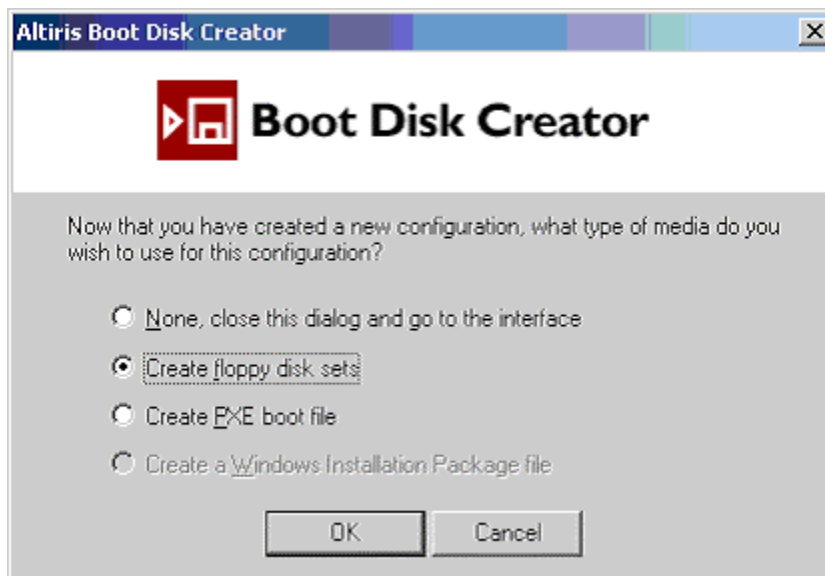
10. Click **Next** to accept the default drive mappings settings.



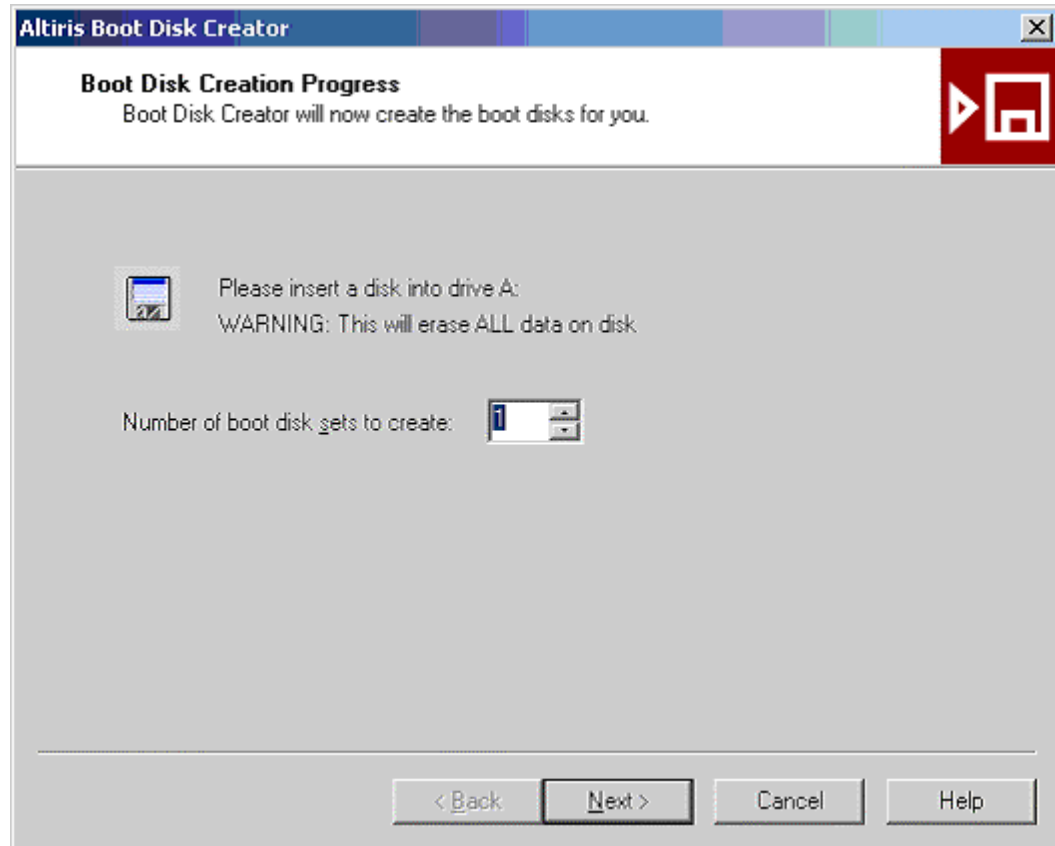
11. Click **Finish** to create the configuration.



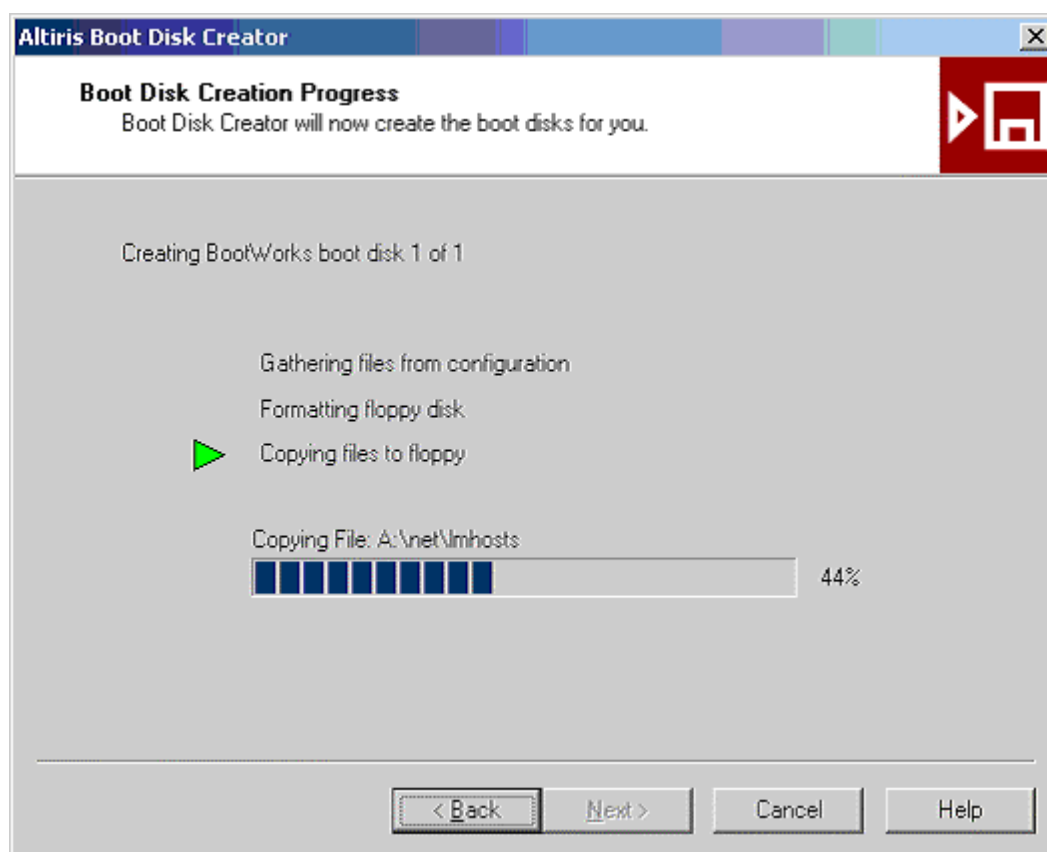
12. When prompted to select a media type, select **Create floppy disk sets**, and click **OK**.



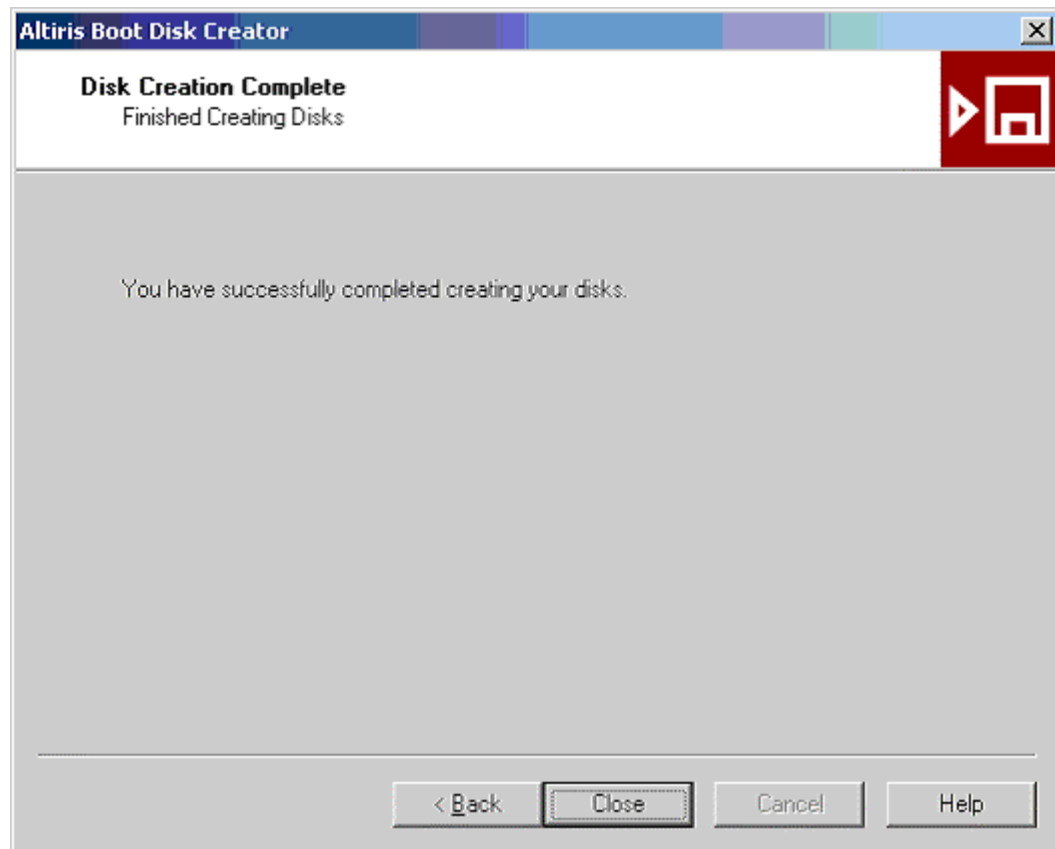
13. Insert a diskette into the diskette drive, select the number of boot disk sets to create, then click **Next**.



The Boot Disk Creator begins creating the disks.



14. When the diskettes are complete, click **Close**.



Pre-Deployment Configuration for Windows Scripted Install Jobs

These configuration modifications must be performed before using the Windows scripted install jobs, and are necessary after a first-time installation or upgrade of the Rapid Deployment Pack.

Preconfiguring the ProLiant Support Pack for Windows

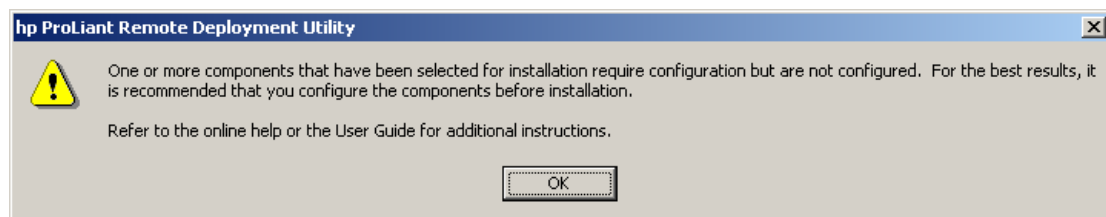
The Web-based Management portion of the Foundation Agents requires that a password be configured in the Smart Component before installation. This password is also used by several other components in the ProLiant Support Pack. Without the password, the Web-based Management portion of the Foundation Agents installs but does not function correctly and is not accessible on your deployed servers.

NOTE: The components in the ProLiant Support Pack must only be configured one time. The components do not have to be configured each time they are deployed. After a component in the ProLiant Support Pack is configured, it is ready for deployment.

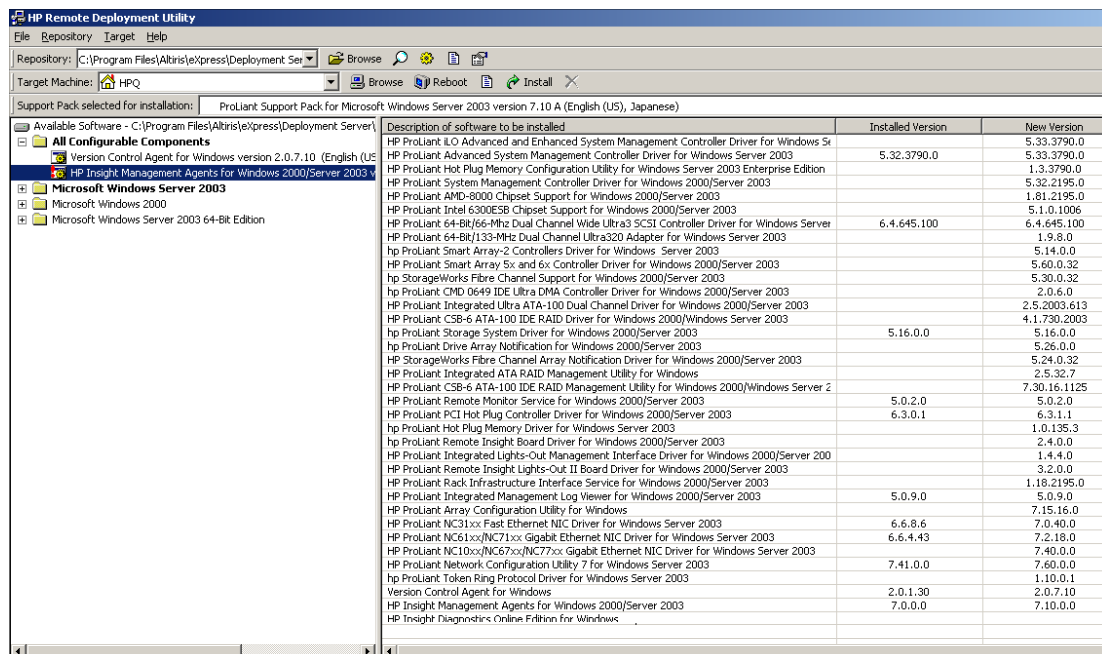
To configure the Foundation Agent (and other Smart Components) in the ProLiant Support Pack:

1. Open Windows Explorer and browse to the following directory:
 - For Windows 2000 Server or Advanced Server:
`.\program files\altiris\express\deployment server\deploy\cds\compaq\ss.xxx\w2k\ntcsp`
 - For Windows Server 2003, Standard Edition; Windows Server 2003, Enterprise Edition; or Windows Server 2003, Web Edition:
`.\program files\altiris\express\deployment server\deploy\cds\compaq\ss.xxx\wnet\csp`
where *xxx* represents the version of the support files just installed.
2. Locate and double-click **setup.exe**.

3. If the Remote Deployment Utility displays the following message, click **OK** to continue.



4. Expand the All Configurable Components directory in the tree in the left pane.
5. Right-click **HP Insight Management Agents for Windows 2000/Server 2003 version x.x.x**, where x.x.x is the software version, then select **Configure**.



6. In the Administrator Password section, enter a password in the Password field, and confirm. The operator and user passwords can also be entered at this time.

NOTE: This Administrator password does not have to be the same as the Deployment Server Administrator password.

7. If Systems Insight Manager is used, select the appropriate trust mode for the environment at the Insight Manager 7 Trust Relationship window.

If Systems Insight Manager is not used, select **Trust by Name** at the Insight Manager 7 Trust Relationship window, and enter *none* in the text field.

For additional information about selecting a trust mode, refer to the *HP Insight Management Agents User Guide*, located at <http://h18013.www1.hp.com/products/servers/management/agents.html>.

8. Click **Save**.

NOTE: The Version Control Agent for Windows and the Survey utility for Windows can also be configured at this time, if desired, in the same manner as the Foundation Agents.

Preconfiguring the Altiris Deployment Agent for Windows

The Altiris Deployment Agent is a service that enables a server to be managed by the Deployment Server. It provides the capability to redeploy the server, perform pre- and post-imaging configurations, and process various commands, such as software installation.

By preconfiguring the default settings, all agents installed as part of the provided Windows scripted install jobs have the consistent settings.

The provided Windows scripted install jobs use the *aclient.inp* file, located in the Deployment Server root directory, for agent settings. This setting is independent of the Remote Client Installer settings, established from Tools>Options>Agent Settings.

1. From a text editor, open the *aclient.inp* file, located in the Deployment Server root directory.

NOTE: By default, the Deployment Server root directory is *.\program files\altiris\express\deployment server*.

2. Select the option to force applications to close when the server needs to reboot, ensuring that jobs do not fail if the server must be rebooted, by changing the following line:

```
; ForceReboot=No  
to  
ForceReboot=Yes
```

3. Modify the Bootworks disk prompting behavior by changing the following line:

```
; BootDiskMessageUsage=4  
to  
BootDiskMessageUsage=0
```

If boot diskettes are used instead of PXE, and a configuration task is issued to a computer when a diskette is not in the diskette drive, a prompt displays instructing you to insert a diskette. If this occurs when you are not logged in to the server, you must log in and close the prompt before the job can continue. By selecting to never be prompted for a boot diskette, the server reboots to the normal operating system if a boot diskette is not inserted in the server when required.

4. Select the option to synchronize the target server time with the Deployment Server time by changing the following line:

```
; SynchTimeWithServer=No  
to  
SynchTimeWithServer=Yes
```

5. Save the file and close the text editor.

Modifying the Microsoft Windows unattend File

The Windows unattend file controls the Windows unattended installation process. Before performing a scripted install, you might need to modify some of the settings to align with your environment. Alternatively, you can use the Modify Configuration capability of the console to change the settings after installing the operating system.

For more information about editing a Windows scripted install unattend file, refer to the Windows 2000 online resource kit at

<http://www.microsoft.com/windows2000/techinfo/reskit/en-us/default.asp>.

For the location of the unattend files on the Deployment Server, refer to “Understanding the ProLiant Integration Module Deployment Server” in the *HP ProLiant Essentials Rapid Deployment Pack—Windows Edition User Guide*.

Refer to the following table for the unattend file names for each specific Windows operating system.

Table 5-1: Unattend File Names

File Name	Operating System
w2k.txt	Windows 2000
wnet.txt	Windows 2003

To change the default administrator password:

1. Locate the [GuiUnattend] section in the unattend file.
2. Change the AdminPassword= line.

NOTE: This password is stored and transmitted as cleartext.

To change the default workgroup or domain name:

1. Locate the [Identification] section in the unattend file.
2. To set the workgroup name, change the JoinWorkgroup= line.
3. To set the domain name, change the JoinDomain= line.

If you are joining a domain and have not already created a computer account, you might need to add CreateComputerAccountInDomain=Yes and set DomainAdmin= and DomainAdminPassword=.

To add the Product ID/Key:

NOTE: Because the unattend file is used by multiple servers, use a Volume License Key that contains multiple or unlimited activations.

- For Windows 2000:
 - a. Locate the [UserData] section in the unattend file.
 - b. Add ProductID=XXXXX-XXXXX-XXXXX-XXXXX-XXXXX, where the Xs represent the key value.
- For Windows 2003:
 - a. Locate the [UserData] section in the unattend file.
 - b. Add ProductKey=XXXXX-XXXXX-XXXXX-XXXXX-XXXXX, where the Xs represent the key value.
 - c. You can also add AutoActive=Yes in the [Unattend] section to automatically activate the installation.

Pre-Deployment Configuration for Linux Scripted Install Jobs

These configuration modifications must be performed before using Linux scripted install jobs, and are necessary after a first-time installation or upgrade of the Rapid Deployment Pack.

Preconfiguring the ProLiant Support Pack for Linux

The Web-based Management portion of the Foundation Agents requires a password to be configured before installation. This password is also used by several other components in the ProLiant support software. Without the password, the Web-based Management portion of the Foundation Agents installs but does not function correctly and is not accessible on your deployed servers.

Support software directories and scripts associated with each Linux operating system are located on the NFS server at `/usr/cpqrdp/ss.xxx/yyyy/csp`, where `xxx` is the ProLiant Support Pack version and `yyyy` is the Linux distribution shortcut name. For example, `rhas21` represents Red Hat Enterprise Linux AS 2.1.

A support software script, `yyyy.sh`, is used to install the ProLiant support software. This script uses the input file, `linuxpsp.txt`, for setting various parameters including the Linux Web Agent passwords and SNMP settings.

The Linux Web Agent default passwords are listed in Table 6-1.

Table 6-1: Linux Web Agent Default Passwords

User Name	Password
administrator	password
operator	password
user	password

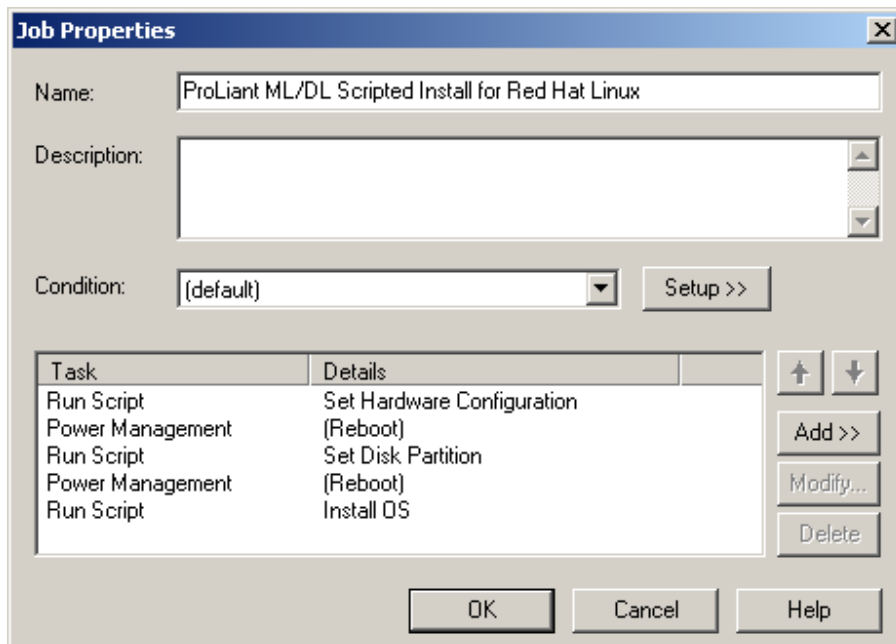
Because the default passwords are documented here, HP recommends changing the passwords either by editing the support software script as previously described or by browsing to the installed server, port 2301 or secured port 2381, and changing the password. Changing the password by editing the support software script before a scripted installation allows these passwords to be mass deployed to target servers. Additionally, after the scripted installation, modified passwords can be replicated by copying the `/var/spool/compaq/wbem/cpqhmmd.acl` file to other servers.

Preconfiguring the Deployment Settings for Red Hat Linux Scripted Install Jobs

For the Red Hat Linux scripted install jobs to operate properly, they must be modified with the host and domain name or IP address of the NFS server on which the installation files are located.

To update each Red Hat Linux scripted install job to point to the NFS server:

1. Locate the Red Hat Linux scripted install jobs to be modified within the Deployment Server Console. Expand the tree view, if necessary, to view the jobs in the Jobs pane.
2. Double-click the job. The Job Properties screen appears.



3. Double-click the **Run Script—Install OS** task.
4. Locate the following line in the script:

```
set nfsserver=0.0.0.0
```

- Change 0.0.0.0 to the host and domain name of the NFS server as follows:

```
set nfsserver=yournfssvr.yourdomain
```

where *yournfssvr* is the host name of the NFS server, and *yourdomain* is the domain name for the NFS server.

Instead of a host name and domain name, an IP address can be specified as follows:

```
set nfsserver=xxx.xxx.xxx.xxx
```

where *xxx.xxx.xxx.xxx* is the fixed IP address of the NFS server.

NOTE: Using the IP address to connect to the NFS server is more effective than using a DNS name, because using a DNS name requires the existence of a DNS server properly configured with an entry for the NFS server.

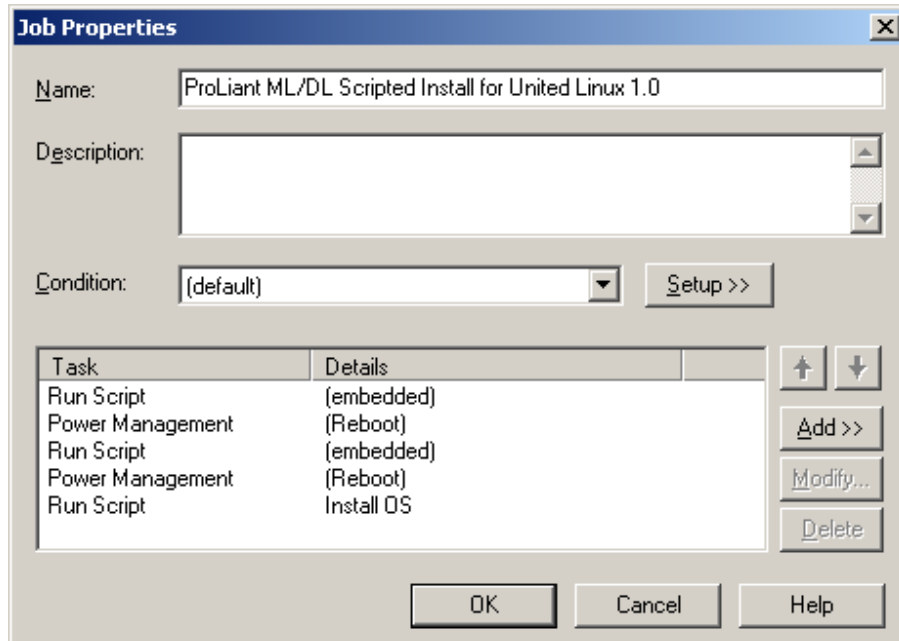
- Click **Finish** to save changes.
- Repeat steps 2 through 6 for any remaining Red Hat Linux scripted install jobs.

Preconfiguring the Deployment Settings for UnitedLinux Scripted Install Jobs

For the UnitedLinux scripted install jobs to operate properly, they must be modified with the host and domain name or IP address of the NFS server where the installation files are located.

To update each UnitedLinux scripted install job to point to the NFS server:

- Locate the UnitedLinux scripted install jobs to be modified within the Deployment Server Console. Expand the tree view, if necessary, to view the jobs in the Jobs pane.
- Double-click the job. The Job Properties screen appears.



3. Double-click the **Run Script—Install OS** task.

4. Locate the following line in the script:

```
set nfsserver=0.0.0.0
```

5. Change 0.0.0.0 to the host and domain name of the NFS server as follows:

```
set nfsserver=yournfssvr.yourdomain
```

where *yournfssvr* is the host name of the NFS server, and *yourdomain* is the domain name of the NFS server.

Instead of a host name and domain name, an IP address can be specified as follows:

```
set nfsserver=xxx.xxx.xxx.xxx
```

where *xxx.xxx.xxx.xxx* is the fixed IP address of the NFS server.

NOTE: Using the IP address to connect to the NFS server is more effective than using a DNS name, because using a DNS name requires the existence of a DNS server properly configured with an entry for the NFS server.

6. Click **Finish** to save changes.
7. Repeat steps 2 through 6 for any remaining UnitedLinux scripted install jobs.

Pre-Deployment Configuration for Packaged Cluster Deployment Jobs

These configuration modifications must be performed before using the provided packaged cluster deployment jobs for Windows, and are necessary after a first-time installation or upgrade of the Rapid Deployment Pack.

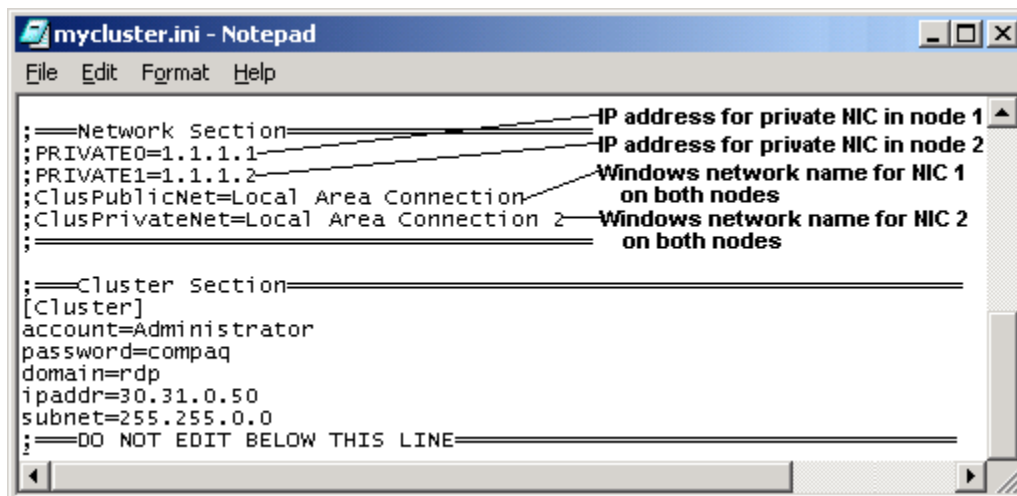
Step 1: Creating and Customizing a Configuration File

1. On the Deployment Server, copy and rename the `clustername.ini` file in the `.\\deploy\\configs\\clusters` directory.

IMPORTANT: A unique cluster configuration file must be created for each packaged cluster to be deployed. This file must have the same name as the packaged cluster being deployed.

2. In the new file, specify a domain administrator-level account name and password for the cluster. This account will be used to run the cluster service.
3. Specify an IP address and subnet mask for the cluster.
4. Specify the domain for the cluster.
5. Specify the available private IP addresses for the private NIC in each node in the cluster.
6. Specify the Windows network name for the private NIC in each node participating in the cluster.
7. Specify the Windows network name for the public NIC in each node participating in the cluster.

For example, refer to the following sample cluster configuration file text.



NOTE: If standard packaged cluster hardware is used, the default network names provided in the cluster configuration file will work, as long as they are not changed from the default Windows install during the scripted installation or in the server image.

IMPORTANT: Microsoft Cluster Services requires a domain administrator account to run the cluster service. This password is stored in plain text in the cluster configuration file on the Deployment Server. HP recommends protecting server administrator passwords by ensuring that:

- Only authorized users have access to the eXpress share where the configuration files are located.
- A user account exists for accessing the eXpress share separately from the rest of the Deployment Server.

Step 2: Providing the Domain Administrator Account for Packaged Cluster Deployment

Each packaged cluster deployment job for Windows contains a task to create or join the cluster from each node. Windows security requires that this task be run by an account with domain administrator credentials. Provide these credentials for each packaged cluster deployment job to be run in a particular domain:

1. Open the Job Properties window for the packaged cluster deployment job.
2. Scroll to the Create/Join Cluster task and click **Modify>Advanced**.
3. In the Security Context area, select **Enter user name and password**, and supply the domain/user name and password valid in the domain for the cluster.
4. Click **OK** to close the window, and then click **Finish** to close the Script Properties window.
5. Click **OK** to close the Job Properties window.
6. Repeat steps 1 through 5 for each packaged cluster job before deployment.

Step 3: Making the Cluster Nodes Available in the Deployment Server Console

The cluster nodes must be available in the Deployment Server Console and organized in a group named for the packaged cluster they will form before running the packaged cluster deployment jobs.

Importing the Cluster Node

Import the cluster nodes into the Deployment Server Console using one of the following methods.

Method One—New Computer GUI

Using the New Computer GUI provided by the Deployment Server Console:

1. Open the New Computer Properties dialog box.
2. Click **File>New>Computer**.
3. Click **Add**.
4. Enter the Name, Serial Number, and Computer Name.
5. Click **Microsoft Network**.
6. Select **Domain**, and enter the domain the node will join.
7. Click **TCP/IP**.
8. Click **Add** next to the Network Adapter dropdown menu. Network Adapter 2 appears in the list.
9. Select **Assign a static IP address**.
10. Enter an IP address and subnet mask for the private network card in this node.
11. Click **OK** to close New Computers Properties.
12. Repeat steps 3 through 11 to provide the information for the second node.
13. Click **OK** to close New Computers.

Method Two—Import Computers From a File

Use the Import Computers from a File method in the Deployment Server Console to create an import file based on the sample import file, `clusimport.csv` in `.deploy\configs\clusters`.

In the following sample file, the cluster node is named “clusnode1,” the serial number is “D207KGY1K056,” a “1” indicates domain membership joining the RDP domain, a “1” indicates DHCP for NIC 1, the cluster name is “mycluster,” the IP address and subnet mask is “15.15.15.1,” and “255.0.0.0” indicates its private NIC.

```
clusnode1,,D207KGY1K056,,clusnode1,1,RDP,,1,,,,,,,,,,,,,  
HASE,HP,,,,,,,,,,,,,mycluster,,,,0,15.15.15.1,255.0.0.0  
clusnode2,,D207KGY1K057,,clusnode2,1,RDP,,1,,,,,,,,,,,,,  
HASE,HP,,,,,,,,,,,,,mycluster,,,,0,15.15.15.2,255.0.0.0
```

Method Three—Modify After Initial Deployment

Modify the computer name in the console after initial deployment (the first PXE boot) of the cluster nodes, add the nodes to a computer group in the console, and name this group after the cluster to be formed.

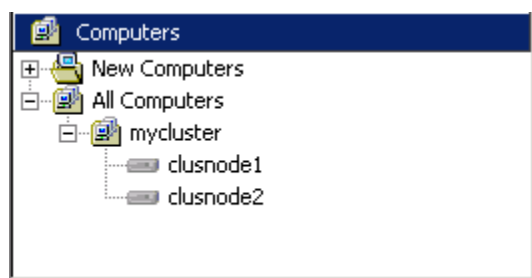
IMPORTANT: Method three is only available if using the scripted packaged cluster deployment jobs.

Creating the Computer Group

After the computers are in the console, create a new computer group with the same name as the cluster to be formed.

1. Right-click in the Computers pane, and select **New Group**.
2. Rename this group to the name of the cluster.
3. Drag the nodes to form this cluster into the new group.

The cluster nodes should now be listed in a group with the same name as the cluster they will form. The following figure displays a cluster group called “mycluster” and the nodes “clusnode1” and “clusnode2.”



Step 4: Customizing the Microsoft Answer Files for Packaged Cluster Scripted Install Jobs

1. Specify a domain-level administrator account and password in the unattended Windows install answer files. For Windows 2000, this file is w2kclus.txt, and for Windows Server 2003, this file is wnetclus.txt. These files are located in the Deployment Server in the .\deploy\configs\clusters directory.
2. Update the file with the following information:
 - A domain administrator account name
 - The password for that account
 - The domain for that account (which the cluster nodes will join)

For example:

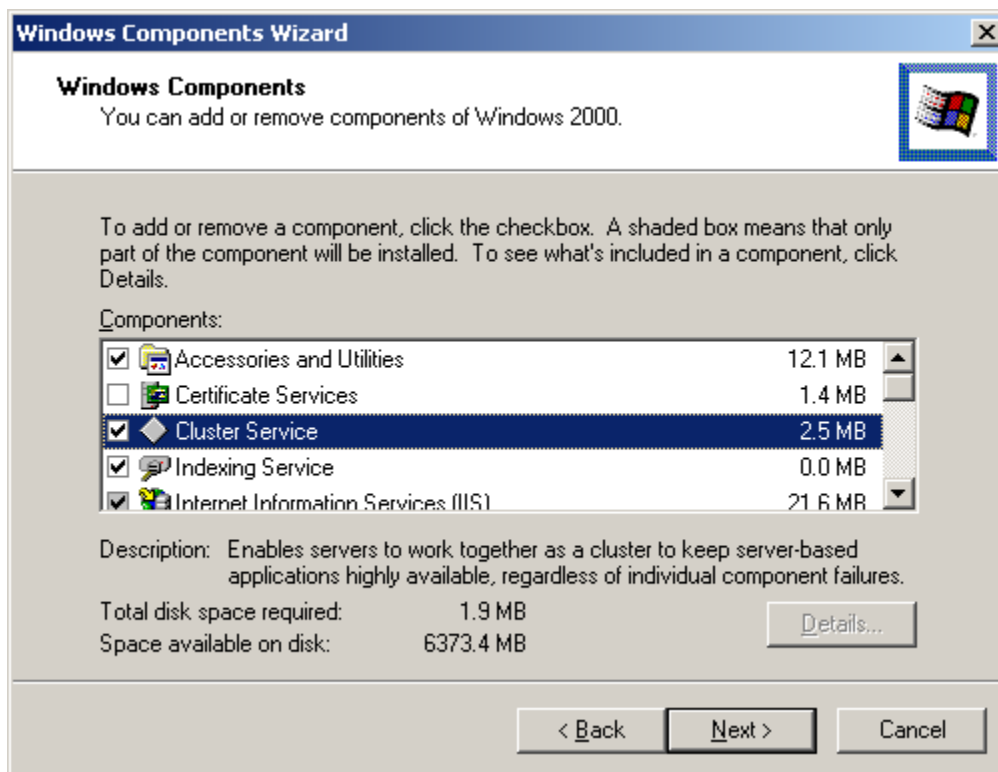
```
[Identification]
DomainAdmin=*
DomainAdminPassword=*
JoinDomain=*
```

NOTE: This account does not need to be the domain administrator account for the cluster, but the account must have permission to add computers to the domain.

Step 5: Creating a Reference Configuration for a Packaged Cluster Imaged Install

If using the Packaged Cluster Imaged Install for Windows job, a reference ProLiant DL380 server configuration is needed. This reference server must be configured with the Microsoft Windows 2000 Advanced Server or Microsoft Windows Server 2003, Enterprise Edition. Additionally, any minimum required service packs and support packs must be installed. An image of this server is then taken for use in the Packaged Cluster Imaged Install for Windows job. To correctly configure the reference server:

1. Install the desired operating system on the reference server.
 - a. For Windows 2000, select the **Cluster Service** component during setup to copy the clustering binaries to the server before imaging.
 - b. For Windows Server 2003, the necessary clustering software is automatically installed, so this additional setup task is not required.

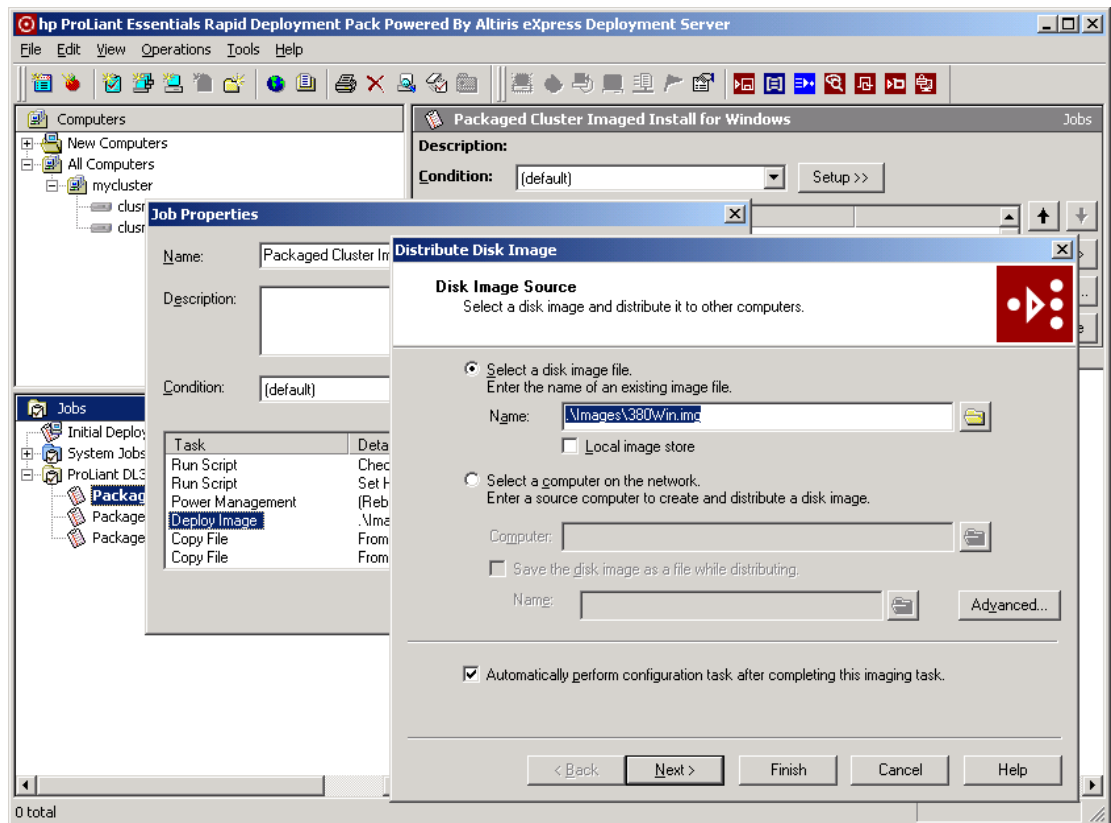


2. Install any service packs and support packs to the reference server.
3. Capture an image of the reference server with the Capture Hardware Configuration and Windows Image job located in the SmartStart Toolkit and OS Imaging Events folder.

- After the Capture Hardware Configuration and Windows Image job has completed on the reference server, browse to the image file on the Deployment Server. This file is located in the .images folder. Rename the file wincap.img to a file name describing the operating system and the server type captured.

NOTE: HP recommends making a copy of the Capture Hardware Configuration and Windows Image job. Rename the job and edit it to create an image with the desired file name.

- From the Deployment Server Console, make a copy of the Packaged Cluster Imaged Install for Windows job and rename it based on the type of server and operating system captured. In this new job, open the Deploy Image task and edit the image file name to point to the reference server image file.



IMPORTANT: The image specified for a Packaged Cluster Imaged Install for Windows job that will deploy a Windows 2000 image must contain the clustering binaries. If deploying a Windows 2003 server image, this is not a requirement because the cluster binaries are a default component of this version of Windows.

Manually Installing Windows Operating System CDs

If you did not copy the Windows operating system CDs during the installation, manually copy the files for each omitted operating system to ensure that the provided Windows jobs operate properly.

To manually copy the Windows operating system files to the Deployment Server directory:

1. Locate the `.deploy\cds\windows` directory on the Deployment Server. If this directory does not exist, create it.
2. Select the appropriate directory for the operating system files to be copied. If this directory does not exist, create it.

Table A-1: Windows Operating System Shortcut Names

Operating System	Shortcut Name
Windows 2000	w2k
Windows Server 2003	wnet

3. Copy the `i386` directory from the operating system CD to the operating system directory.

NOTE: The provided Windows scripted install jobs rely on the existence of operating system files at `.deploy\cds\windows\xxx\i386`, where `xxx` is the operating system shortcut name.

Manually Installing Red Hat Enterprise Linux Boot Files

If you did not copy the Red Hat Enterprise Linux boot files during the installation, manually copy the files for each omitted distribution to ensure that the provided Red Hat Enterprise Linux jobs operate properly.

NOTE: Linux boot files for all other Linux distributions are provided on the Rapid Deployment Pack—Windows Edition CD and installed during the ProLiant Integration Module for Deployment Server installation.

To manually copy the Red Hat Enterprise Linux boot files to the Deployment Server directory:

1. Locate the `.deploy\cds\compaq\ss.xxx\yyyy` directory on the Deployment Server, where `xxx` is the ProLiant Support Pack version and `yyyy` is the Linux distribution shortcut name for the distribution files to be copied.

Table B-1: Linux Distribution Shortcut Names

Linux Distribution	Distribution Shortcut Name
Red Hat Enterprise Linux AS 2.1	rhas21
Red Hat Enterprise Linux ES 2.1	rhes21
Red Hat Enterprise Linux AS 3	rhas3
Red Hat Enterprise Linux ES 3	rhes3

IMPORTANT: The copied boot files must match the distribution version copied during the ProLiant Integration Module for NFS Server installation or the manual installation of Linux distribution CDs.

2. Insert the first distribution CD into the Deployment Server CD-ROM drive.

3. Copy the following files into the Deployment Server directory from Red Hat Linux CD #1 as shown in the following table.

Table B-2: File Sources and Destinations

Source	Destination
/dosutils/loadlin.exe*	.\deploy\cds\compaq\ss.xxx\yyyy\dosutils\loadlin.exe
/images/pxeboot/vmlinuz	.\deploy\cds\compaq\ss.xxx\yyyy\dosutils\autoboot\vmlinuz
For rhas21 and rhes21: /images/pxeboot/ initrd-everything.img**	.\deploy\cds\compaq\ss.xxx\yyyy\dosutils\autoboot\initrd.img
For rhas3 and rhes3: /images/pxeboot/initrd.img	
* For Red Hat Enterprise Linux 3 Update 1, the loadlin.exe file has already been copied to the destination directory.	
** Rename the copied initrd-everything.img file to initrd.img.	

Manually Installing Linux Distribution CDs

If you did not copy the Linux distribution CDs during the installation, manually copy the files for each omitted distribution to ensure that the provided Linux jobs operate properly.

To manually copy a set of Linux distribution CDs to the NFS server directory:

1. Locate the `/usr/cpqrdp/yyyy` directory on the NFS server, where `yyyy` is the Linux distribution shortcut name for the omitted distribution.

Table C-1: Linux Distribution Shortcut Names

Linux Distribution	Distribution Shortcut Name
Red Hat Enterprise Linux AS 2.1	rhas21
Red Hat Enterprise Linux ES 2.1	rhes21
Red Hat Enterprise Linux AS 3	rhas3
Red Hat Enterprise Linux ES 3	rhes3
Red Hat 7.3	rh73
Red Hat 8.0 Professional	rh80

IMPORTANT: The copied Red Hat Enterprise Linux distribution files must match the boot files version copied during the ProLiant Integration Module for Deployment Server installation or during the manual installation of the Red Hat Enterprise Linux boot files.

NOTE: UnitedLinux distribution files cannot be manually copied. These files must be installed during the ProLiant Integration Module for NFS Server installation.

2. Insert the first distribution CD into the NFS server CD-ROM drive.
3. Mount the CD-ROM drive:

```
mount /mnt/cdrom (Red Hat)
```

or

```
mount /media/cdrom (UnitedLinux)
```

4. Copy the contents of the distribution CD, including subdirectories, to the distribution directory. For example:

```
cp -r /mnt/cdrom/* /usr/cpqrdp/rhas21
```

5. Unmount the CD-ROM drive:

```
umount /mnt/cdrom (Red Hat)
```

or

```
umount /media/cdrom (UnitedLinux)
```

6. Repeat steps 2 through 5 to copy the remaining CDs in the distribution set to the distribution directory.

The distribution CDs containing the RedHat/RPMS directory, and the RedHat/Updates directory for Red Hat Enterprise Linux 3 Update 1, are required. However, all distribution CDs in the set might not be needed.

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